



EZM 10
EINSATZZEITMESSER

GB


Sinn

SPEZIALUHREN 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 magnetic field protection and scratch-resistance. Some of our customers, such as divers, pilots or the German GSG 9 special police unit, need to rely on their watch in their respective careers because their life depends on it.

They all swear by the high performance, resilience and durability, as well as the quality and precision of these timepieces. The water and pressure-resistance

data are reviewed and authenticated at regular intervals, as is the case with our diving watches, for instance. We, for our part, give absolute priority to functionality, which ultimately determines the design. Our watches only feature technological attributes that really make sense. All the while, we remain committed to our guiding principle 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, Lothar Schmidt

A handwritten signature in black ink, appearing to read 'L. Schmidt', followed by a small flourish.

SINN SPEZIALUHREN ZU FRANKFURT AM MAIN

It was back in 1961 that the 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 control. 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 insiders' 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.



All developments thoroughly tested

Take, for instance, the absolutely condensation-free and anti-reflective diving watch made of stainless steel – designed with HYDRO Technology. Other examples include a chronometer chronograph fashioned from a 22-carat gold alloy, which is as hard as stainless steel, and a chronometer whose resistance to magnetic interference is 20 times greater than normal. Or those watches filled with protective gas and featuring an integrated dehumidifying capsule to counteract moisture infiltration and the ageing of the watch movement. This list would not be complete without mentioning the development of so-called Einsatzzeitmesser (EZM) watches for special police units and border guards, and the Temperature Resistance Technology that allows mechanical watches to perform at temperatures ranging from -45°C to $+80^{\circ}\text{C}$. The 303 KRISTALL model passed the fire and ice test during the 1998 Yukon Quest sledge dog race that crosses the icy wilderness of Canada and Alaska, where temperatures are known to plunge to -40°C . The watch was strapped to the arm of some of the participants on top of their protective clothing. This was followed in 1999 by the 203 ARKTIS model. This diving chronograph passed its field test in the North Polar Sea with flying colours.



Innovations and authentications

One of our most important inventions is the oil-free DIAPAL Technology, based on low-friction materials for the key functional parts of the watch, enabling them to run without lubrication. This technology was first employed in our jubilee watch, the palladium alloy/white gold Frankfurt Financial District Watch. TEGIMENT Technology, with which SINN achieves a virtually scratch resistance surface for its watches, represents another milestone. Other innovations include diving watches made from original submarine steel, as used in the construction of the outer shell of German class 212 submarines. Germanischer Lloyd, the world's biggest classification society providing marine safety services, has been testing the aspects of water and pressure resistance since 2005. Moreover, an official authentication process conducted by Germanischer Lloyd in 2006, SINN diving watches as diving gear for the very first time in the watch making sector and tested them in keeping with European diving equipment standards. The result: these timepieces passed the temperature resistance and functionality tests with a sensational success. All test results are authenticated with signature and seal.



Ongoing advancement in technology and quality

Our top priority is always to develop watches which 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 first has to 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.

Workshop modifications and hand-engraving

From the robust case and the polished crystal through to elaborate refinements: we make sure that each and every detail in our watches is fit for purpose. The same applies to our workshop modifications. Only the perfect interaction of all components and technologies ensures that our watches can meet all its design specifications in full. For example: the SZ02 calibre of our U1000 diving chronograph. The 60 minute scale of the stop-minute counter is much simpler and more intuitive to read than the 30 minute scale commonly found in other watches. The hand engraving represents a highly personal form of refinement. If required, our specially trained master engraver can etch a name, initials, monograms or symbols onto the rotor, movement bridge and case back.



EZM 10
EINSATZZEITMESSER



The EZM 10 is the result of a development idea which first came about in 2003. Our declared aim throughout the development process has been to optimise both the movement and the features of the watch. The overriding purpose of the redesign was to create a mission timer which meets the demands of a professional pilot's watch to perfection.

Clear readability is of vital importance when pilots use a mechanical watch. And so the SINN SZ01 movement has been incorporated in this chronograph, which makes it much easier to read off stop times. Because the SZ01 is specially designed with a centre-mounted 60 minute stopwatch hand. This technical design feature has two advantages: firstly, 60 minutes are now counted in one sweep of the counter instead of the usual 30 minutes, and secondly, the minute stop scale covers the entire diameter of the dial, making it possible to read times off at a single glance. The chronograph function indicators have been coated with orange-coloured daylight luminous paint. This allows both the stopped times and the current time to be read in the ultraviolet light often used in darkened cockpits. This function is complemented by a backwards-counting pilot's bezel with minute ratcheting and luminous key mark. As in all of our pilot's watches, this bezel has a captive design to protect it against loss, plus an exclusive special feature: the ring insert is made of high-quality sapphire crystal glass.

But the EZM 10 is especially suitable for professional use not only on account of its clear readability but also because of the technologies incorporated. These include DIAPAL for a lubrication-free escapement, Ar-Dehumidifying Technology for maximum functional reliability and superior freedom from fogging, and Temperature Resistance Technology which ensures accurate timekeeping within a temperature range of -45 to +80°C.

The large push-pieces with Black Hard Coating on a TEGIMENT Technology basis are integrated in the case and help ensure that the chronograph is easy to handle even when wearing gloves. The push-pieces themselves are not screwed in and are effectively sealed by means of the D3 system which we developed ourselves.

The EZM 10 looks highly impressive yet is comfortable to wear — not least due to the bead-blasted case made from high-strength titanium with TEGIMENT Technology, used here for the first time in a SINN watch. For the crystal we have used high-quality sapphire crystal with anti-reflective coating on both sides.

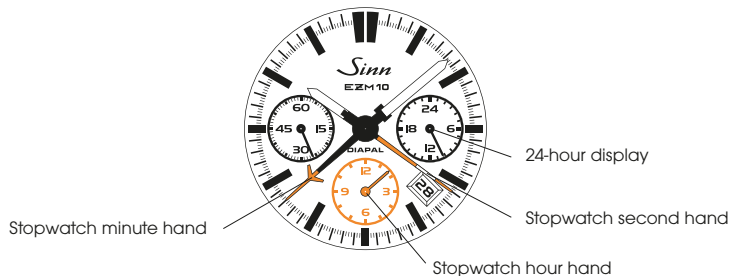
The result is a distinct, high-performance pilot's watch which is eminently suitable for practical, everyday use and is resistant to high and low pressures of up to 20 bar. We provide a five year warranty on this model on account of its superior technological features (as we do on all models featuring DIAPAL Technology).

CENTRE-MOUNTED STOPWATCH MINUTE HAND – THE SINN SZ01

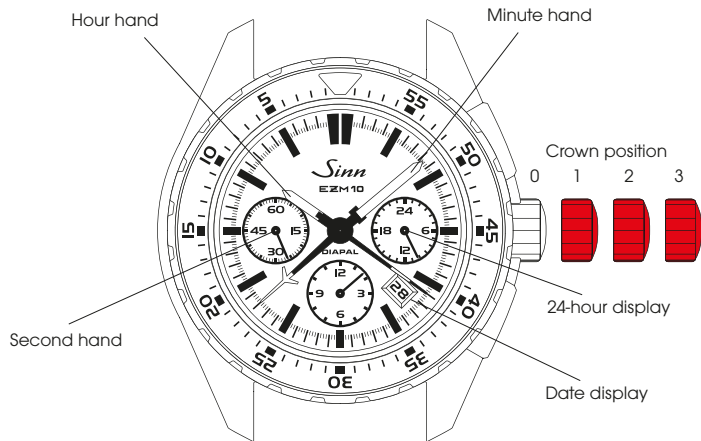
The SZ01 chronograph is based on the successful Valjoux 7750 and has been specially developed by SINN. The development work began back in 2003.

The main priority in undertaking the redesign was to make the chronograph functions significantly easier to read off. Which is why we attached so much importance to finding a first-class technical solution to mounting the stopwatch minute hand in the centre of the dial. This allows users to take accurate stop times even more quickly and simply. The clarity and distinct readability of this chronograph stem from the design of the well-known Lemania 5100 movement.

Our redesign enhances the readability in two ways: firstly, 60 minutes are now counted in one sweep of the hand instead of the usual 30 minutes, and secondly, the minute stop scale covers the entire diameter of the dial.



INSTRUCTIONS FOR USE



To wind the watch (crown position 1)

The crown is screwable (crown position 0). To loosen the crown, turn it *counter-clockwise*. The movement is wound by turning the crown *clockwise*. About 40 winds of the crown are generally enough to ensure its reliable functioning. 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 rewind it.

Time adjustment (crown position 3)

In crown position 3, the motion is paused. This helps you to set the watch precisely. For accurate time setting, we recommend moving the hand past the desired minute marker and then adjusting it *counter-clockwise*. Please make sure that the date changes at midnight and not at midday when adjusting the time. Move the hand forward until the date changes before you attempt to set the time. The movement restarts as soon as you leave crown position 3.

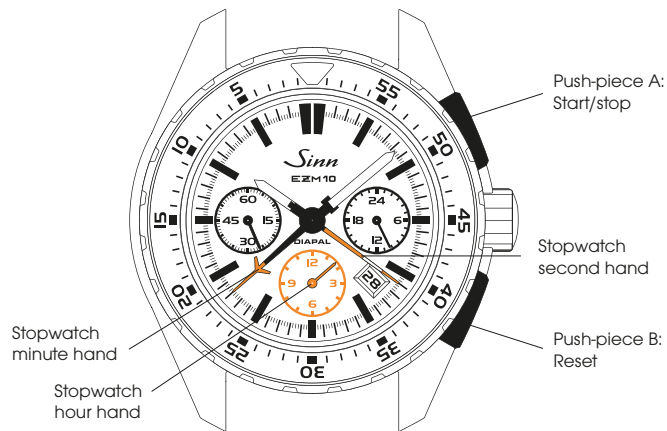
Quickset date adjustment (crown position 2)

Do not use this function between 9 p.m. and 3 a.m. Set the crown in the 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 become 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.



Using the pilot's bezel to measure time

The pilot's bezel is an outer ring divided into minutes, and can be moved manually in both directions. The triangle glows in the dark. It can be used in a number of ways, including to measure important lengths of time. For example, you can set the marking to the beginning of the time span to be measured, or you can use it to indicate the end of a given span of time. The triangle can be set in relation to the hour hand, minute hand or centre second hand.



ADJUSTING THE LENGTH OF THE WATCH STRAPS

If you don't know how to shorten or lengthen the solid bracelet, please contact your SINN dealer or the watchmakers in our customer service department in Frankfurt am Main. Our customer service employees are also happy to help you on the telephone.

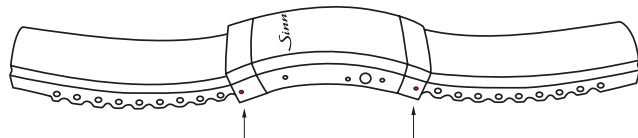
Adjusting the length of the solid bracelet

For optimal comfort, each side of the watchband should contain the same number of links. If you choose to remove an uneven number of links, the upper portion of the watchband (on the 12 o'clock side) should be longer. For example: If you want to shorten the bracelet by removing a total of three links, you should remove two from the 6 o'clock side and just one from the 12 o'clock side. When they leave the factory, the solid bracelets have the same number of links on the 12 o'clock side and the 6 o'clock side. If you have requested a shorter length, please be sure to check the number of links on each side before making any additional changes.

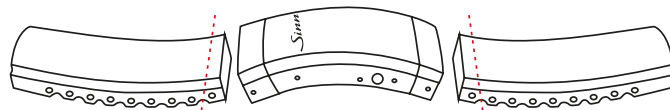
1. Remove the screws on the side of the link you wish to remove, or at the point where you wish to add a link.
2. Remove the excess link or insert the new one.
3. Before replacing the screw, add a small drop (not too much!) of the threadlock (AN 302-42 medium-strength) adhesive to the screw thread.

Adjusting the length of the silicone strap

1. Release the silicone band from the clasp. To do so, using the pointed end of the band replacement tool to push the spring bar out of the fastener. The other side of the spring bar can be removed while the fastener is open, enabling you to remove the silicone band.



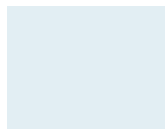
2. Using a knife or scissors, cut the silicone band in the middle between two metal pins. You should shorten the band symmetrically and little by little, starting from the clasp, until you have reached the desired length. Test the length from time to time before proceeding. Shortening both ends by the length of one metal pin results in a total difference of 10 mm in the length of the strap; shortening one end reduces the length by 5 mm.



3. Remove the first metal pin and replace it with the spring bar. Then reattach the clasp to the band.

Ar-DEHUMIDIFYING TECHNOLOGY

Indication colours of the drying capsule



Pale blue

up to 25 %
saturation



Light blue

up to 50 %
saturation



Medium blue

up to 75 %
saturation



Dark blue

up to 100 %
saturation



Initial condition



Drying capsule
saturated

Perfect freedom from fogging

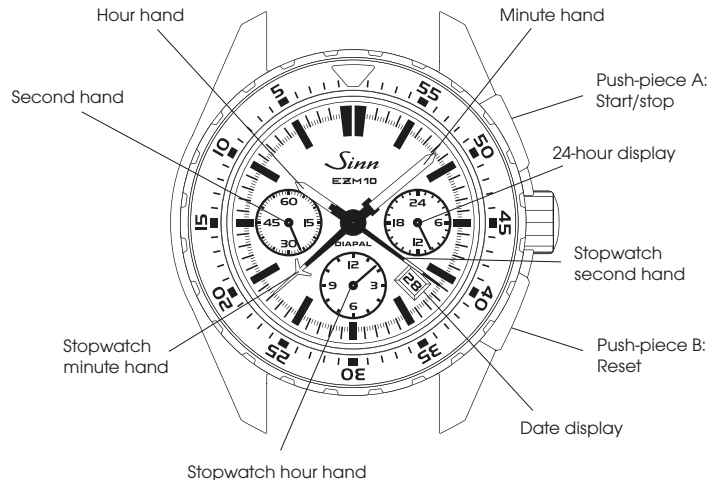
All watches in this series are water-resistant as per DIN 8310. But even with watertight instruments, the air enclosed in the case contains water in a gaseous state. And air can also penetrate the seals and acrylic glasses. When the water vapour in the case condenses into liquid, the instruments are impossible to read. To prevent this from happening, we have developed the Ar-Dehumidifying Technology. The combination of a special drying capsule, EDR seals (**e**xtr**e**m**e** **d**iffusion **r**eduction) and a filling of protective gas guarantee that the crystal remains free from fogging, even in difficult conditions.

Longer service intervals

The sophisticated Ar-Dehumidifying Technology considerably retards the aging process of the watch's inner workings and keeps the movement functioning properly for longer. That is why we issue a three year warranty on all our watches featuring Ar-Dehumidifying Technology. When the drying capsule is saturated indicated by a deep blue colour, refer to picture on the left side), we recommend you have it exchanged so you can continue to enjoy all the advantages of the Ar-Dehumidifying Technology (enhanced reliability, longer maintenance intervals).

The colour scale for the Ar-Dehumidifying Technology: the capsule continues to absorb moisture until the darkest colouration is reached.

TECHNICAL DETAILS



Mechanical Movement

- Sinn movement SZ01
- Self-winding mechanism
- 34 bearing jewels
- 28,800 semi-oscillations per hour
- Shock resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Watch Case

- Titanium, bead-blasted
- Crown screwable
- Sapphire crystal glass in front, anti-reflective on both sides
- Case back screw-fastened
- Water-resistant as per DIN 8310
- Water-resistant and pressure resistant up to 20 bar (= 200 m underwater depth)
- Low pressure resistant
- Band lug width 22 mm
- Case diameter:
3h - 9h = 46,5 mm
6h - 12h = 44 mm

Functions

- Hours, minutes, subsidiary seconds
- 24-hour display
- Chronograph
- Date display
- Pilot's bezel

SINN Technologies

- DIAPAL Technology, lubrication-free escapement
- Ar-Dehumidifying Technology
- Case made with TEGIMENT Technology
- Push-pieces made with Black Hard Coating
- Functionally reliable from -45 °C up to +80 °C
- Integrated push-pieces protection with D3-System
- Captive bezel

Dial and Hands

- Matte black dial
- Indices and hands coated with luminescent colour
- Pilot's bezel with luminescent colour
- Chronograph function with daylight luminous paint



SERVICE

General advice

To preserve the water resistance for as long as possible, the watch should be rinsed whenever it has been in contact with seawater, chemicals, etc. If your watch is frequently worn in/under water, we recommend having its water resistance checked at yearly intervals.

The watch is designed to withstand high levels of mechanical wear and tear and is shock resistant as per DIN 8308. Nevertheless, it goes without saying that continual mechanical stress in the form of impacts or vibration will affect its durability. Care should therefore be taken to protect your watch from unnecessary wear and tear. It is only possible to judge how well the watch keeps time after it has been in operation for approximately eight weeks, since it takes that long for the working mechanism to become adjusted, especially in view of the fact that everybody has different lifestyles and habits. In the event of any excessive deviation, please keep a day-to-day record of its timekeeping over a period of about one week, for example.

Do you have any questions?

Our employees will be pleased to advise you. Simply get in contact with us. We look forward to talking to you.

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

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

E-mail: kundendienst@sinn.de



Should you send your watch in to customer service, we need to ensure the process goes smoothly, the following information:

- Name, address, e-mail address and fax number (where applicable) and a daytime telephone number.
- A detailed description of the problem: Exact nature of the defect? At what time does the problem arise? How often does the problem occur?
- Wherever possible, please state the date of purchase and your customer no. (indicated on the invoice) or enclose a copy of the invoice.

For information about the process, please refer to the section entitled "Repairs" in our "General Terms and Conditions of Business". You'll find our "General Terms and Conditions of Business" on our website www.sinn.de/en. We will be pleased to send you a copy of the "General Terms and Conditions," or you can contact our customer service department directly. For insurance reasons, we strongly recommend sending us any return goods by registered parcel post. As an alternative for customers in Germany, there is also the option of a collection service covered by transport insurance, on request. To ensure your request is dealt with smoothly, please call our customer service department! We regret that we are unable to accept deliveries with unpaid postage!

Please send your watch to the following address:

Sinn Spezialuhren GmbH
Kundendienst
Im Fuldchen 5-7
60489 Frankfurt am Main
Germany

You can also find comprehensive information about SINN, our watches and technologies at www.sinn.de/en.

Nachtsansicht: Auch die Ringeinlage aus Saphirkristallglas besteht mit nachleuchtenden Ziffern und Indizes.

Luminous: Also the ring insert made from sapphire crystal glass has striking luminous figures and indices.



Durch die Beschichtung der Stoppfunktion mit orangefarbener Tagesleuchtfarbe sind alle Uhrwerksfunktionen in abgedunkelten Cockpits unter Schwarzlicht ablesbar.

The orange-coloured daylight luminous paint coating of the stop function ensures that all the timekeeping functions remain visible under UV light in darkened cockpits.

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