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Sinn

U1000

EZM 6

SERIES U1000 EZM 6

EN

Sinn

SPEZIALUHREN ZU FRANKFURT AM MAIN

CONTENTS

DEAR CUSTOMER,

Since the company was founded in 1961, we have focused on the creation of high-quality mechanical watches. Nowadays, watch lovers associate innovation and patents with the name of Sinn Spezialuhren. And it’s not just our diving watches that stand for high performance, robustness, and durability, quality and precision.

These watches do, however, constitute an outstanding example of how we repeatedly push the limits of what can be achieved physically in development.

We are driven by the question of which new technologies and materials can be used to make diving watches safer and more suitable 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. It is therefore no coincidence that the series U1, U2, U200, U212, U1000 and UX are made of high-strength, seawater-resistant German Submarine Steel. The T1 and T2 models are another example. All case parts for these mission timers are made of high-strength titanium. Both submarine steel and high-strength titanium predestine our diving watches for use in salt water.

Fittingly, we work closely with an independent company specialising in technical maritime security. The world's largest classification society DNV GL (formerly Germanischer Lloyd, Hamburg) checks and certifies the diving-watch data – including compliance with European diving device standards, which is unique in the watch industry.

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

Yours sincerely,

Lothar Schmidt


Sinn
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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 °C to +80 °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.

Image: SINN Calibre SZ04


SEVENTEEN
17 JEWELS
Sinn
SZ04


Sinn
U1000

SERIES **U1000** (EZM 6)

The U1000 is the superlative diving chronograph with a distinctive character. A watch with very special characteristics and high-tech features not found anywhere else.

Faultless operation, even when diving at 1,000 meters (= 100 bars)
In terms of usability of the chronograph function, SINN has once more set innovative new benchmarks here, in a number of respects. The pusher function, for example, can also be used underwater and, thanks to its large, unscrewed pushers, operated easily even when wearing diver's gloves. The function is guaranteed to operate until nominal pressure is reached. Thanks to SINN's inclusion of this feature, the wearer can record an additional mission time, in addition to using the bezel.

Ar-Dehumidifying Technology, for zero condensation
For every diver, knowing that their watch is not going to mist up is of key, lifesaving importance. That's one safety requirement that we've solved through our sophisticated, patented dehumidifying technology. Divers can now safely operate their watch in the water knowing that the crystal will not fog or cloud with humidity.

Increased operational reliability, thanks to Ar-Dehumidifying Technology
To slow down ageing of the oils due to enclosed and/or residual air humidity inside the watch, the movement is housed in a near-dry atmosphere created by three elements (drying capsule, EDR seals and protective gas filling). This durably enhances operational reliability and accuracy.

Guaranteed to work between –45°C and + 80°C

SINN's special oil and an adjusted position tolerance of the parts in the U1000 guarantee operation at temperatures ranging from −45 °C to +80 °C.

German Submarine Steel guarantees seawater resistance

First-class material quality makes this diving watch completely resistant to external influences. And the original German Submarine Steel guarantees seawater resistance. This is precisely the steel used by ThyssenKrupp for the external hulls of the U212 A class of the German Navy, which are currently the most advanced non-nuclear submarines in the world.

TEGIMENT Technology and the Black Hard Coating

With the aid of TEGIMENT Technology, we achieve greatly increased scratch resistance through surface hardening. TEGIMENT Technology increases the level of hardness of the base material, such as submarine steel, many times over. To achieve this, we do not apply any coating. The material itself is hardened in the surface area. The hardened surface is far better protected against scratching than the surface of the base material. The tempering with the TEGIMENT Technology forms the basis for the application of the Black Hard Coating – a high quality PVD coating.

Form follows function

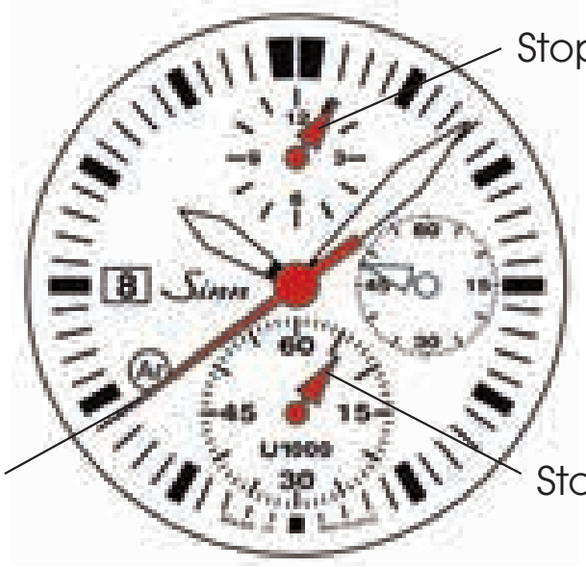
When it comes to design, too, this watch signals its imposing presence, indestructibility and outstanding ability to perform. Essential features for any owner wanting to know that their personal safety will be ensured each day, even under extreme diving and wearing conditions. What's more, the watch's design meets SINN's standards for mission time instruments. For SINN, one thing counts above any other: form should always rigorously follow function.


Sinn

SINN MOVEMENT SZ02

The SZ movement 02 is a modification of the SZ01 movement, characterized by an off-center 60-minute counter.

The Valjoux 7750, by contrast, only has a 30-minute chronograph counter. Stopped times are difficult to see on this standard caliber as the interim marks of the hour counter are very close to the hour indices. Only with the aid of this pointer is it possible to distinguish between a minute display of 0 to 30 and 30 to 60. The SZ02 permits direct reading of the minutes right through from 0 to 60 minutes.



(Ar)-DEHUMIDIFYING TECHNOLOGY

Indication colours of the drying capsule

Pale blue	Light blue	Medium blue	Dark blue
Up to 25% saturation	Up to 50% saturation	Up to 75% saturation	Drying capsule saturated

When the drying capsule is saturated, as indicated by a deep blue colour, we recommend you have it exchanged so you can continue to enjoy all the advantages of the Ar-Dehumidifying Technology (enhanced reliability, longer intervals between maintenance).

Perfect freedom from fogging

All the watches in this series meet the technical requirements for waterproofness, as set out in standard 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. 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**xtreme **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 slows 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, as 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 intervals between maintenance).

THE CAPTIVE DIVER'S SAFETY BEZEL

The construction of the rotating bezel is extremely important in terms of safety. To prevent any risks to the life and health of the diver, the solution we use for the captive diver's bezel is based on two elements.

One is the captive design of the rotating bezel, which differs greatly from that of conventional snap-in mechanisms. A special design prevents the rotating bezel from becoming detached as the result of catching or being accidentally knocked, causing the set time to be lost.

In addition to the captive design of the captive diver's bezel, it is also protected against accidental rotation – a feature which goes beyond the specifications laid down in DIN 8306. This standard stipulates that it should only be possible to adjust the set time of a diver's watch by turning the bezel anti-clockwise on one side.

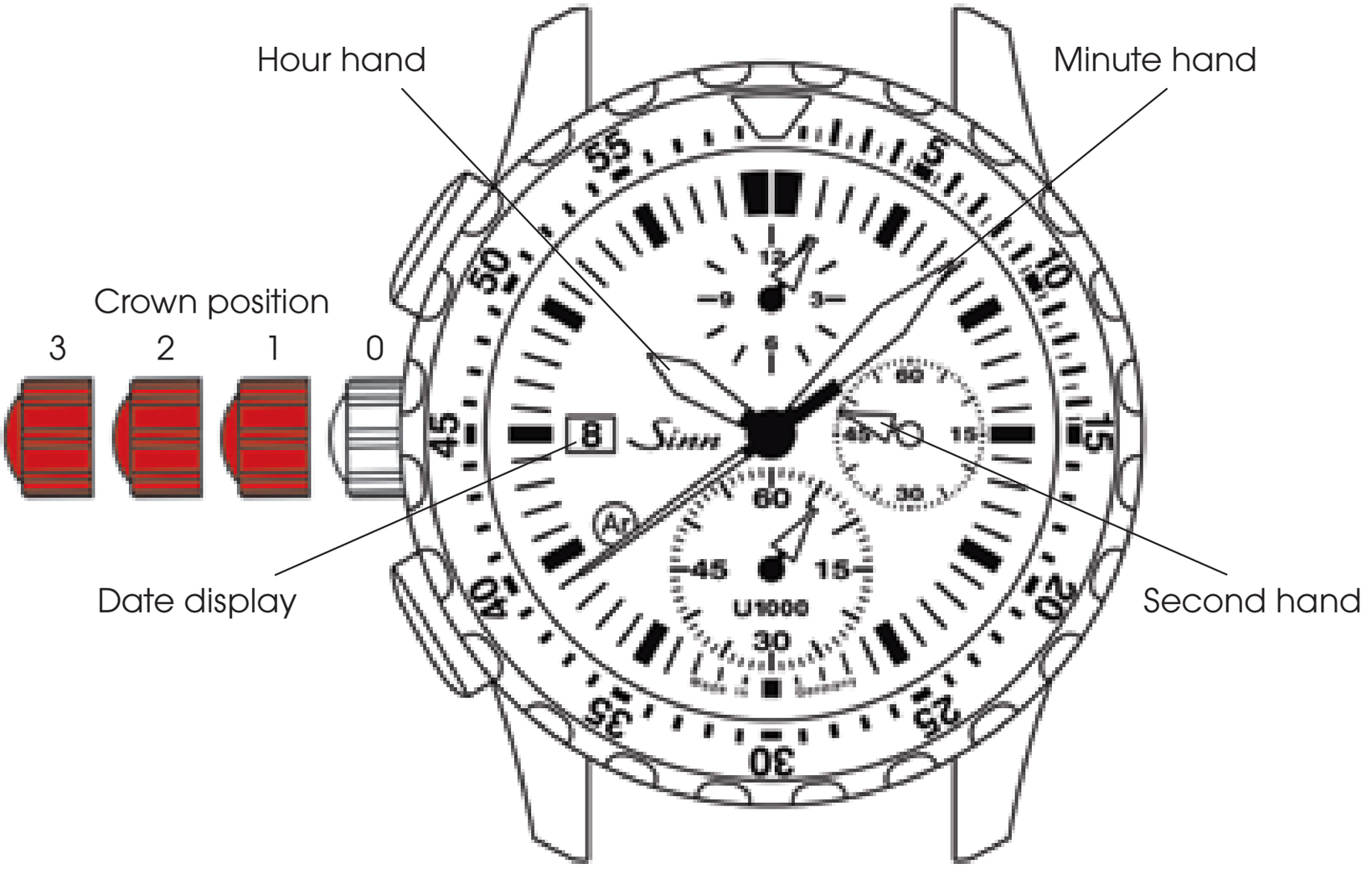
A sophisticated mechanism prevents the safety bezel from being unintentionally rotated. This makes it impossible for the set time to be accidentally knocked and changed.

How to adjust the set time using the captive safety bezel

1. To adjust the set time, first unlock the bezel. Press it down on opposite sides using two fingers. It is not possible to unlock the bezel using just one finger.

2. Hold down the bezel and turn it anti-clockwise to the desired set time. Once you release the bezel, the rotation protection is reapplied and the bezel is once again prevented from being accidentally adjusted.

INSTRUCTIONS FOR USE



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.

Using the chronograph to measure time

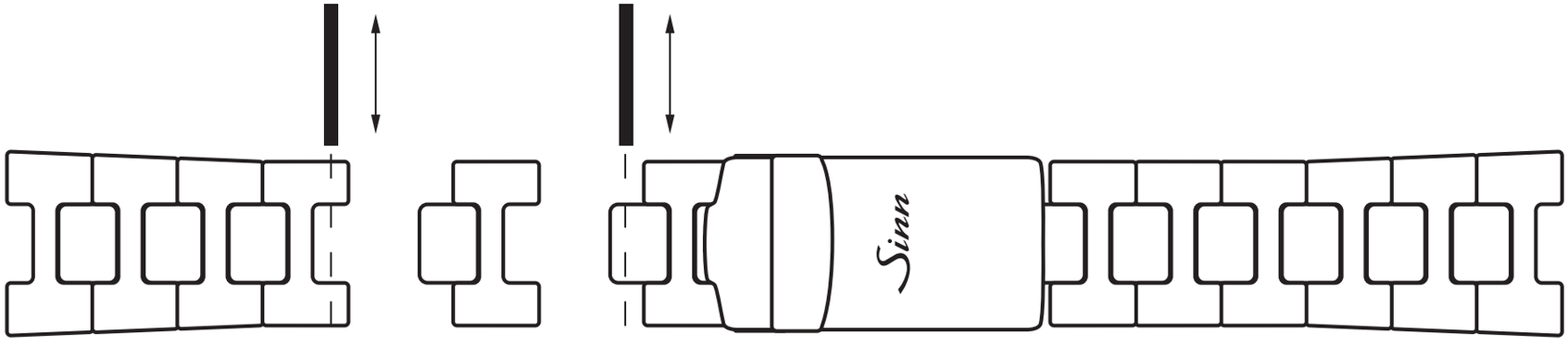
The chronograph is operated by means of buttons A and B. The measurement starts when button A is pressed once. Pressing this button again stops the measurement. The measurement is resumed by pressing button A once more. This allows you to add up and record the cumulative time. Button B resets the hands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

ASSEMBLING AND ADJUSTING 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.

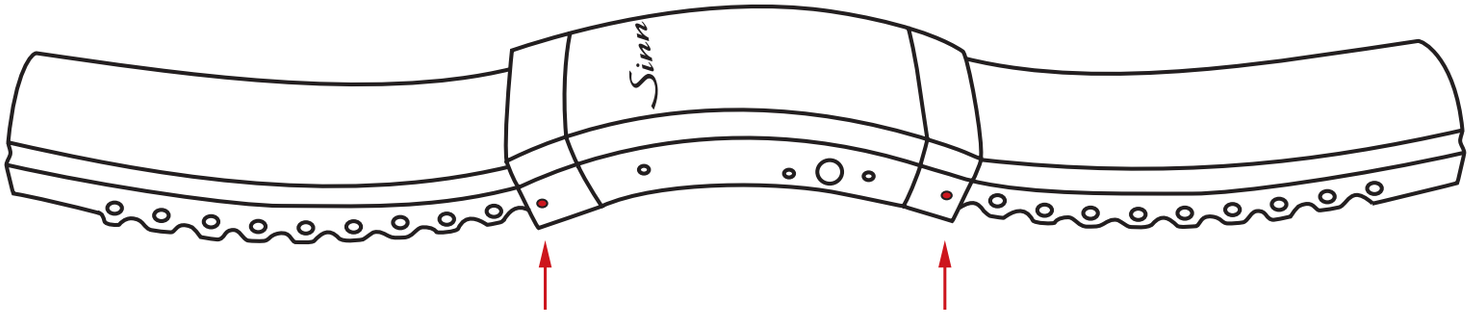
Adjusting the length of the solid bracelet (optional)
Determine the relative lengths of the two sides before adjusting the length of the bracelet. To ensure maximum comfort, both sides of the bracelet should contain the same number of links. If this is not possible, the top bracelet strap (above the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

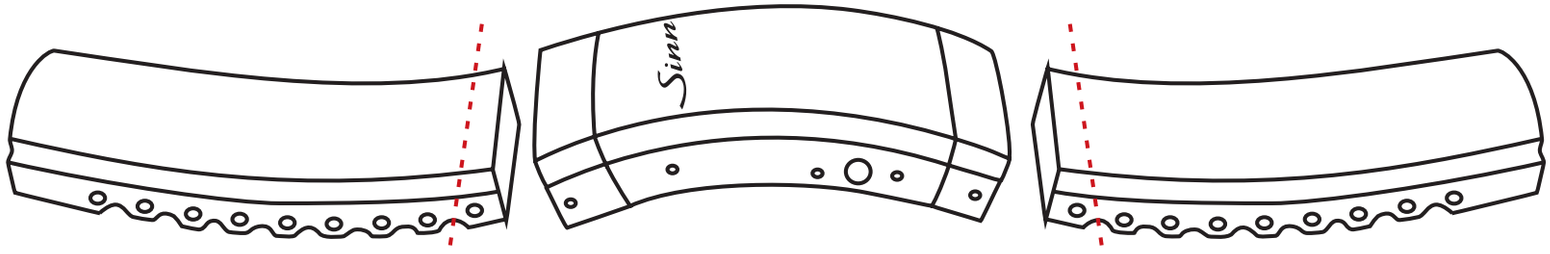


Adjusting the length of the silicone strap

1. Release the silicone band from the clasp. To do so, use 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.



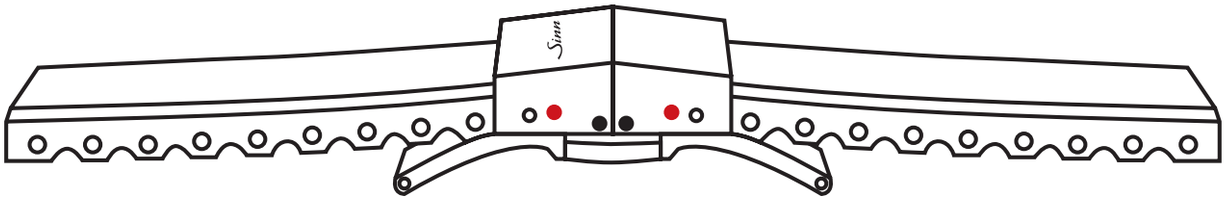
2. Using a knife or scissors, cut the silicone band in the middle between two metal pins. You should shorten the band symmetrically and little by little, starting from the clasp, until you have reached the desired length. Test the length from time to time before proceeding. Shortening both ends by the 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.

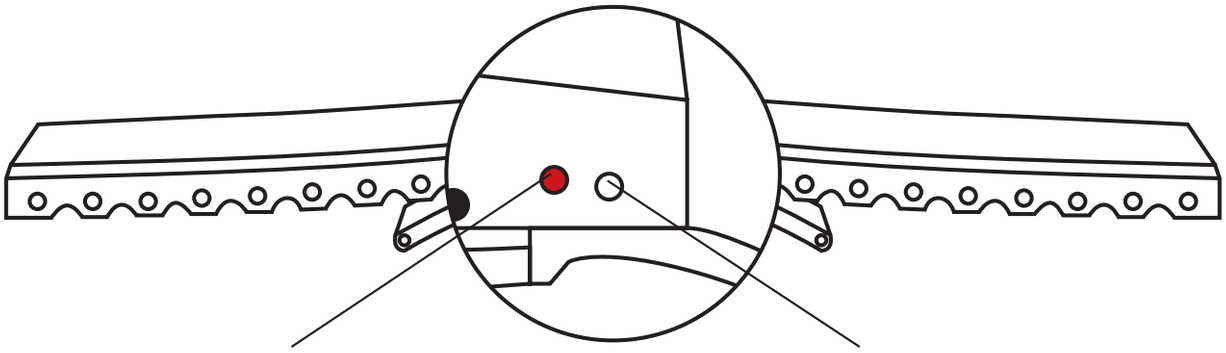


3. Remove the first metal pin and replace it with the spring bar. Then reattach the clasp to the band.

Assembling the butterfly folding clasp as follows

We recommend first inserting the bar at the red marker, as per the illustration. If the silicone strap is too tight, use the option shown in the illustration by the white marker.





Hole for spring bar:
Tight-fitting strap

Hole for spring bar:
Extend strap

If you want to shorten the overall length of the silicone strap, refer to steps 1 to 3 in chapter "Adjusting the length of the silicone strap".

Luminous

TECHNICAL DETAILS

Mechanical Movement
- SINN movement SZ02
- 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

Functions
- Hours, minutes, subsidiary seconds
- Date display
- Chronograph with 60-minute stopwatch hand
- Diver's bezel with minute ratcheting and luminous key mark

Dial and Hands
- Matte black dial
- Indices coated with luminescent colour
- Hour, minute and second hand coated with luminescent colour

Watch case
- U1000, U1000 SDR: Case made of German Submarine Steel, bead-blasted
- U1000 S: Case made of German Submarine Steel, black
- Sapphire crystal glass in front, anti-reflective on both sides
- Case back screw-fastened
- Crown screwable

SINN Technologies
- TEGIMENT Technology, therefore especially scratch-resistant
- Captive safety bezel
- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging
- Temperature Resistance Technology, therefore functionally reliable at temperatures from −45 °C up to +80 °C
- Push-pieces and crown with D3-System
- U1000 S: Black Hard Coating on a TEGIMENT Technology basis
- U1000 SDR: Bezel with Black Hard Coating on a TEGIMENT Technology basis

Tests and Certification
- According to the technical demands for the diving norm DIN 8306
- Tested based on European diving equipment standards EN250 / EN14143 and certified by DNV GL
- Low pressure resistant
- Water-resistant as per DIN 8310
- Pressure-resistant up to 1,000 m diving depth (= 100 bar), certified by DNV GL

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
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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 and to the section entitled "Servicing and repairs" in our general terms and conditions at 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 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.