U 200 B (EZM 8)

GB

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. 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 U1, U2, U200, U1000 and UX are made from high-strength, seawater-resistant German submarine steel. The T1 and T2 models are another example. All case parts for these mission timers are made from 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. Germanischer Lloyd in 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 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.

Advancements in endurance testing

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 20 times the standard. 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 special police units and border patrol guards as well as temperature resistance technology to keep mechanical watches performing at temperatures ranging from −45°C to +80°C. This technology has proven its worth in the EZM 10 TESTAF model, for example, used as part of the official approvals procedure for Eurocopter's EC 145 T2 high-performance helicopter. Hot and cold climate tests and high-altitude experiments were carried out in the deserts of the USA, the Rocky Mountains and the frozen wastes of Canada. The watch was worn unprotected, outside the pilot's overall, during cold climate tests at temperatures reaching −45°C.

Innovations and certifications

Germanischer Lloyd, the world's largest classification society for maritime safety, has been testing our diving watches for pressure and water resistance since 2005. As part of Germanischer Lloyd'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.

We have had selected pilot's watches tested and certified to the Technical Standard for Pilot's Watches (TESTAF) by Aachen University of Applied Sciences since 2012. The TESTAF, the result of a research project at the initiative of Sinn Spezialuhren, ensures that a pilot's watch meets all timekeeping requirements during flight operations in accordance with visual and instrumental flight regulations and is suitable for professional use.

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.

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 of 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 their design specifications in full. Take for example the SZ02 calibre of our U1000 diving chronograph. The 60-minute scale of the stopwatch minute counter is much simpler and more intuitive to read than the 30-minute scale commonly found on 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.

PERFECT DIVING WATCHES

Our watches are famous for their outstanding functionality. We consistently implement this principle in our accurate timepieces for pilots as well as in our diving watches. The technical development of such perfect time-keeping instruments is one of the greatest challenges for our engineers and watchmakers. During a dive, absolute water resistance, perfect readability in all lighting and water conditions and extreme durability are of life-saving importance.

This is due to the fact that we develop these watches exclusively for their intended purpose – with the consequence that the form follows the primary function. Thus we ensure an extremely high standard of reliability, safety and practicality in everyday use.

GERMANISCHER LLOYD CERTIFIES SINN DIVING WATCHES

What does Germanischer Lloyd have to do with a watch manufacturer from Frankfurt am Main? The reputable institute examines and certifies our diving watches – according to various criteria. One testing process focuses on water-and pressure-resistance while a second centres on something that has not yet been seen in the watch industry: certification according to the European diving equipment norm!

Testing for water resistance and pressure resistance
In each dive, the time factor plays an important role in the survival of the diver. Diving watches must therefore be water-resistant, reliable and robust and guarantee perfect readability in all light and water conditions. For us, the certifications are thus a matter of course and simultaneously the fulfilment of a promise of quality. It means all technical information is not only formulated in words, but also proven by facts. Germanischer Lloyd has been testing our diving watches for water resistance and pressure resistance since 2005. In accordance with these certification standards, the EZM 3 is pressure-resistant up to 50 bar; the watches in the T1, U1 and U1000 series up to 100 bar; the watches in the T2, U2 and U200 series up to 200 bar. The watches in the UX series are even pressure-resistant at any achievable diving depth. Here, Germanischer Lloyd confirms the pressure resistance of the case up to 12,000 metres and that of the movement for up to 5,000 metres diving depth. The tests are repeated at regular intervals on all series of these models in order to continuously document the consistency of the quality.

GL

Certificate
No. 77241-09 HH

This is to certify that at request of Messrs. Sinn Spezialuhren zu Frankfurt am Main, Im Fildchen 5-7, 60489 Frankfurt,

a hydraulic pressure test on

2 diving watches

of type line Sinn U200

representing serial number lot

1012.9961-1012.1009

has been performed on September 8th, 2009 with a nominal pressure of 200 bar, corresponding to a diving depth of 2000 m for a testing time of one hour. Additionally, a testing with a test pressure of 250 bar and a testing time of 15 minutes has taken place. The tests have been performed under survey of Germanischer Lloyd with officially calibrated pressure measuring devices.

There were no housing deformations noticed. The proper function of the watches has been determined and a subsequent examination has proofed the leak tightness of the tested specimen.

Hamburg, 2009-09-10

Dr. Robert Sonna

Germanischer Lloyd
confirms and certifies
the pressure resistance.

A premiere: certification in accordance with European diving device standards

Can you apply the same high standards when testing diving watches as you do to breathing apparatus, for example? In order to answer this question, since 2006 – as part of official certification – Germanischer Lloyd has considered our diving watches to be a component of diving equipment, and has tested them in accordance with European diving device standards. This is a process that is unique in the watch industry. Testing in accordance with European standards EN250 and EN14143 was completely uncharted territory for both sides. This was because the standards refer to diving equipment and cannot therefore be readily applied to watches. So the experts at Germanischer Lloyd adapted them and specified two series of tests. In the first test, they store the diving watches at −20°C for three hours, then a further three hours at +50°C. Then, the watches are tested at both temperatures for accuracy and functional reliability. In a second test, the watches must survive three hours at −30°C and three hours at +70°C and 95% humidity. The result: temperature resistance and flawless operation are reconfirmed time and again after both tests and the certification issued. The watches in the UX series have also received the attestation, but, due to their battery operation and lubrication fill, they are subjected to an adapted test of up to −20°C and +60°C.

Certificate
Nr. 77323-10 HH

This is to certify that at request of Messrs. Sinn Spezialuhren zu Frankfurt am Main, Im Fuldchen 5-7, 60489 Frankfurt,

temperature and functional tests on min.

2 diving watches

of type line Sinn U200

representing serial number lot

1012.0001-1012.1000

have been performed on January 28th, 2010. The examinations are based on the requirements of European Standards EN250:2000 and EN14143:2003 for type examination of diving equipment at Zentrum für Sicherheitstechnik of BG Bau in Hiuen.

The proper function of the watches was been determined directly after 3 hours conditioning at -20°C and +70°C with 95% relative humidity.

Hamburg, 2010-03-25

HRO 2067

Dr. Stephan Hinz

Germanischer Lloyd has confirmed and certified the type-based test of temperature resistance and functionality in accordance with the European diving device standards EN250:2000 and EN14143:2003.


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Sinn
U 202

U200 B (EZM 8)

EXCLUSIVE SPECIAL EDITION WITH MATT BLUE ELECTROPLATED DIAL

The U200 B is an exclusive, special limited-edition watch. This mission timer made from German submarine steel is equipped with a matt blue electroplated dial and white illuminated indices and hands. Matching in colour, the watch comes with a white silicone strap and a blue and white textile strap as standard.

This mission timer made from German submarine steel comes with impressive technology, with Ar-Dehumidifying Technology for functional reliability and freedom from fogging. Thanks to temperature resistance technology, the U200 B is functionally reliable in a temperature range of −45 °C to +80 °C.

Its suitability as a diving watch for professional use was verified by Germanischer Lloyd. Germanischer Lloyd verifies and certifies pressure resistance to a diving depth of 2,000 metres and temperature resistance and functionality in accordance with the European diving device standards.

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 Howaldtswerke-Deutsche Werft GmbH and Nordseewerke GmbH for the external hulls of the U212 class of the German Navy, which are currently the most advanced non-nuclear submarines in the world. In addition to seawater resistance, the steel is of the highest anti-magnetic quality and is extremely resistant to cracking.

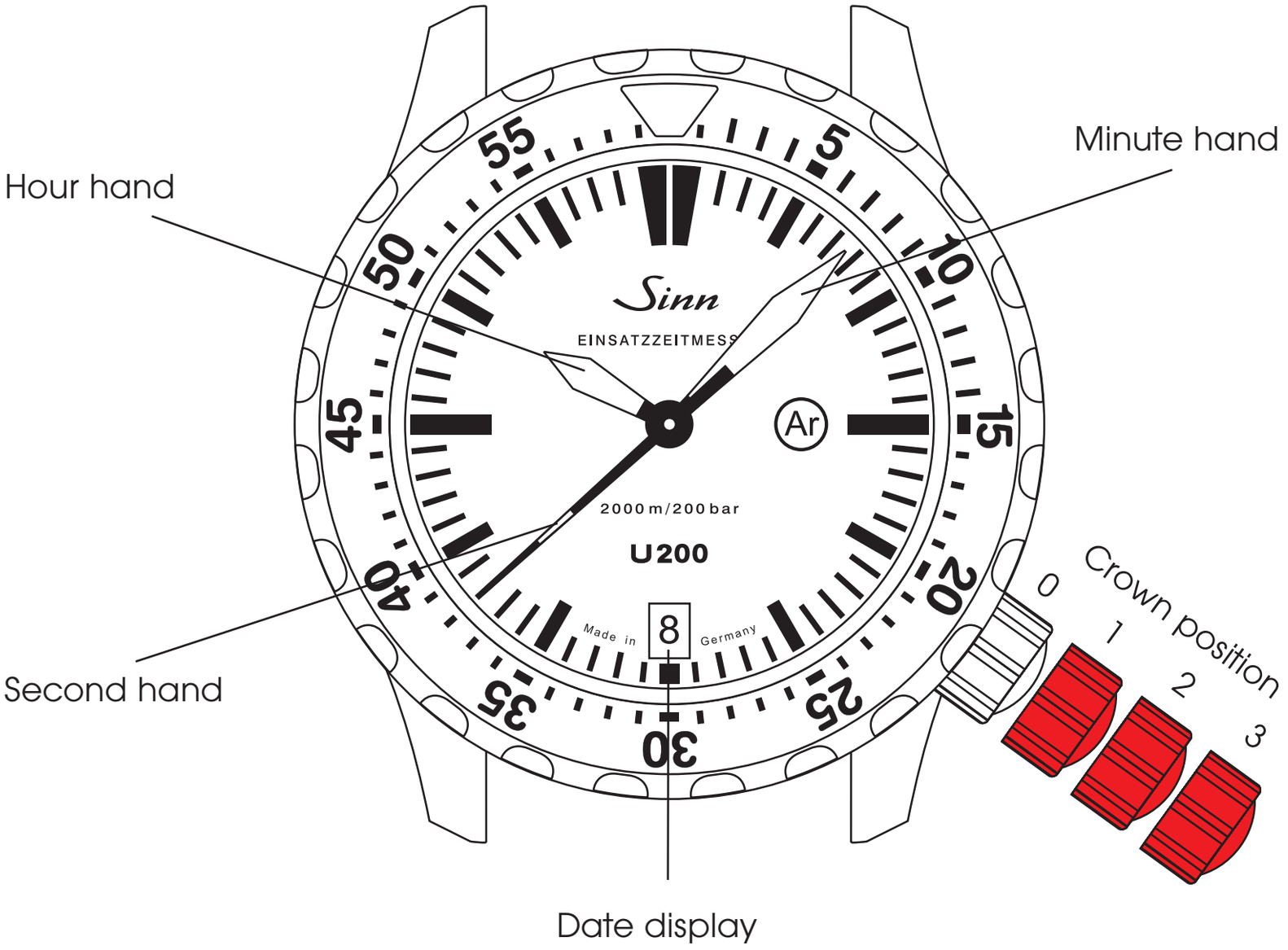
TEGIMENT Technology

Since the captive rotary pilot’s bezel is subject to particularly high levels of stress, we have also hardened it using TEGIMENT Technology. 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 captive diver's bezel

To protect against unintended adjustments, the diver's bezel may only be turned counter-clockwise and can easily be operated while wearing diving gloves. Because the bezel plays a vital role in time measurement, it is an extremely sensitive safety feature. That's why we have protected our bezel against loss with a special construction. Our secure attachment differs significantly from the conventional snap-in mechanism: loss due to unfortunate impacts is practically impossible, because the captive bezel is securely fastened to the centre section of the case.

INSTRUCTIONS FOR USE



Winding 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 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. To set the time accurately, 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 the crown is no longer in position 3.

Quickset date adjustment (crown position 2)
Set the crown in position 2 and turn it *clockwise* until the correct date appears in the date display window.

Please take care to fasten the crown after making adjustments.

Using the diver's bezel to measure time

The diver's bezel is a rotatable bezel that can be set to the minute and only be rotated in one direction to prevent accidental adjustment. It has a luminous main marker which can be used in various ways. It can be used to highlight important time periods. Use it, for example, to mark the start of a period of time; the elapsed time can then be read off at a glance at any time.

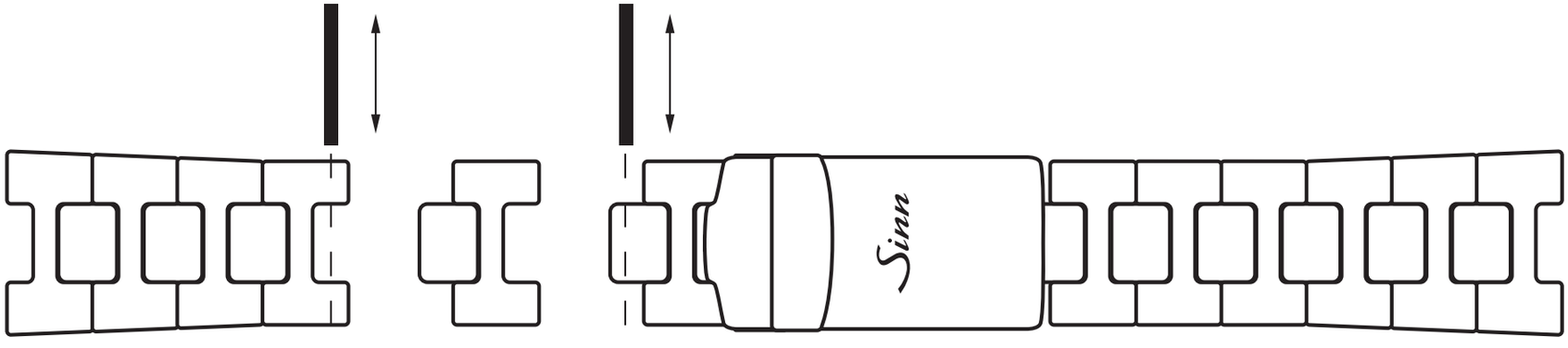
ADJUSTING THE LENGTH OF THE WATCH STRAPS

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 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.

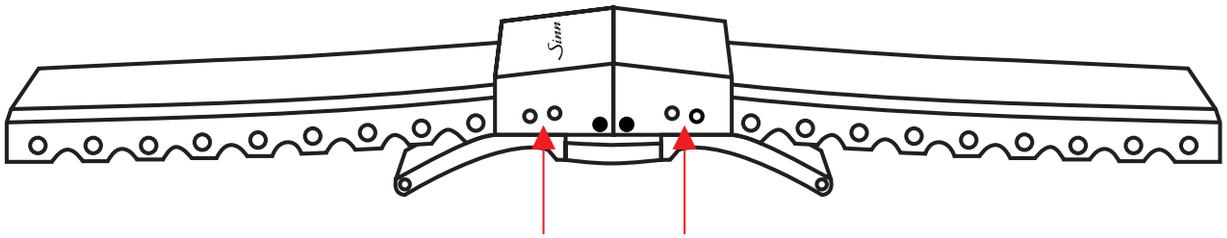
It is not necessary to detach the solid bracelet from the watch or the clasp.

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.

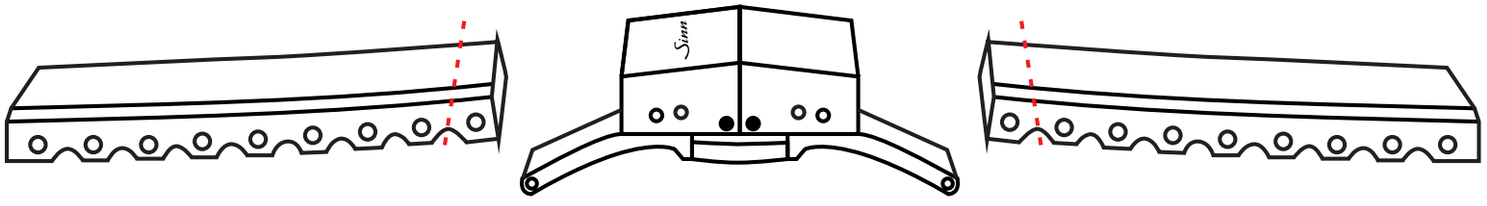


Adjusting the length of the silicone strap

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.

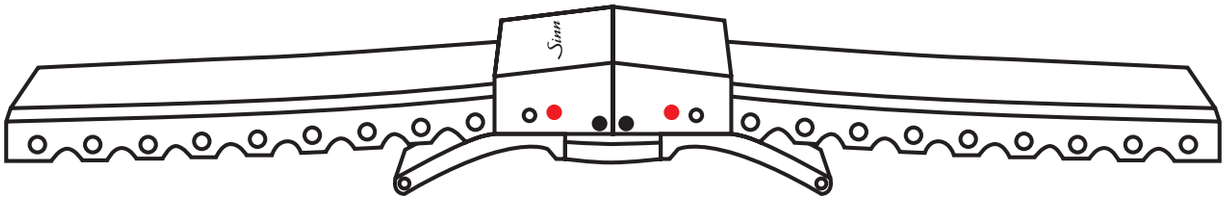


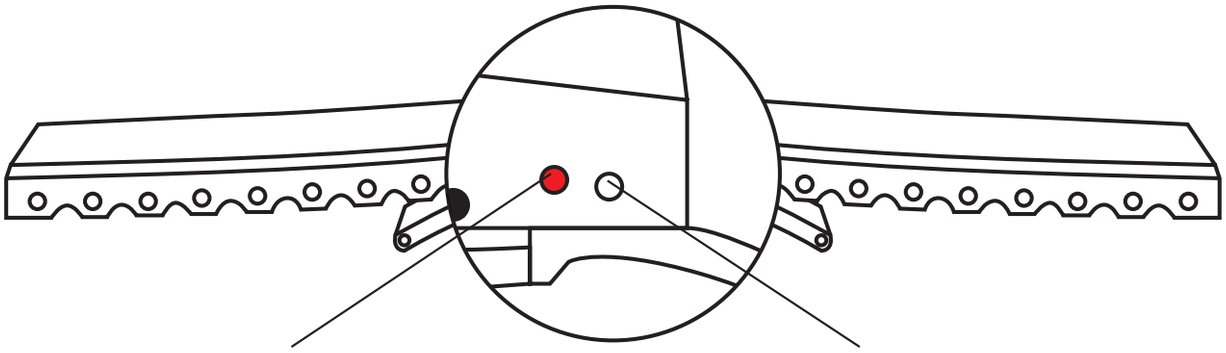
2. Using a knife or scissors, cut the silicone band in the middle between two metal pins. You should shorten the band symmetrically and little by little, starting from the clasp, until you have reached the desired length. Test the length from time to time before proceeding. Shortening both ends by the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

4. Attach 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".

(Ar)-DEHUMIDIFYING TECHNOLOGY

Indication colours of the drying capsule

Pale blue

Up to 25% saturation

Initial condition

Light blue

Up to 50% saturation

Medium blue

Up to 75% saturation

Dark blue

Up to 100% saturation

Drying capsule saturated

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

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. 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).

Luminous

TECHNICAL DETAILS

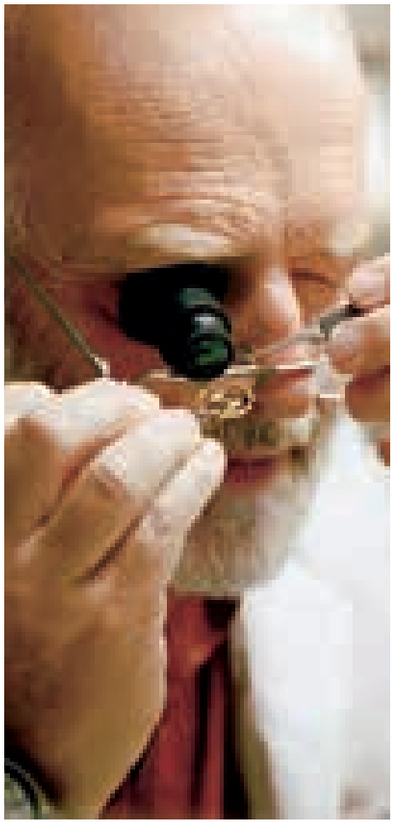
Mechanical Movement
- Calibre ETA 2824-2
- Self-winding mechanism
- Hand adjustment with stop-second function
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Functions
- Hours, minutes, seconds
- Date display
- Diver's bezel with luminescent key mark

SINN Technologies/Special Features
- Ar-Dehumidifying Technology
- Bezel with TEGIMENT Technology
- Functionally reliable from −45°C up to +80°C
- Captive bezel

Watch Case
- German submarine steel
- Crown screwable
- Sapphire crystal glass in front
- Case back screw-fastened
- Band lug width 18 mm
- Case diameter 37 mm

Tests and Certification
- As per European diving equipment standards EN 250 and EN 14143, tested and certified by Germanischer Lloyd, Hamburg
- Water-resistant and pressure resistant up to 2.000 m diving depth (200 bar), tested and certified by Germanischer Lloyd, Hamburg
- As per technical demands for diving watch norm DIN 8306
- Water-resistant as per DIN 8310
- Low pressure resistant



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 water or underwater, 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)69 978 414 400
Telefax: + 49 (0)69 978 414 401
E-mail: kundendienst@sinn.de

Should you need to send your watch in to customer service, we need to ensure the process goes smoothly. We ask that you please include the following information:

- Name, address, e-mail address and fax number (where applicable) and a daytime telephone number.
- A detailed description of the problem. What is the 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 number (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 would be happy 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 Füldchen 5–7
60489 Frankfurt am Main
Germany

Sinn

Spezialuhren zu Frankfurt am Main

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