MODEL SERIES 356

GB

Sinn

SPEZIALUHREN ZU FRANKFURT AM MAIN

CONTENTS

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,

Lothar Schmidt


Sinn
SPEZIALUHREN ZU FRANKFURT AM 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 °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 result is high-quality calibres characterised by impressive technical features. An example of this is the SZ04 with regulateur for the 6100 REGULATEUR series. Or the SZ02 calibre for the U1000 diving chronograph. The 60-second scale of the stopwatch minute counter is much simpler and more intuitive to read than the 30-second scale commonly found in other watches.

A special feature is the high-quality hand-wound calibre UWD 33.1 made by Uhren-Werke-Dresden. This is equipped with a spring barrel supported on one side, also referred as flying spring barrel. In accordance with the functional principle of a swan-neck regulator, the regulator system enables zero-play precision adjustment and beat setting of the watch. Another sophisticated technical feature are the six eccentric weights on the balance wheel for precisely balancing the balance system.


Sinn
MEISTERBUND


Sinn
SON 8
FLIEGER

MODEL SERIES 356

This classically elegant chronograph captures your attention with its clean, esthetic style. There is nothing to distract from the essentials. Everything is designed to ensure accurate reading of the various times.

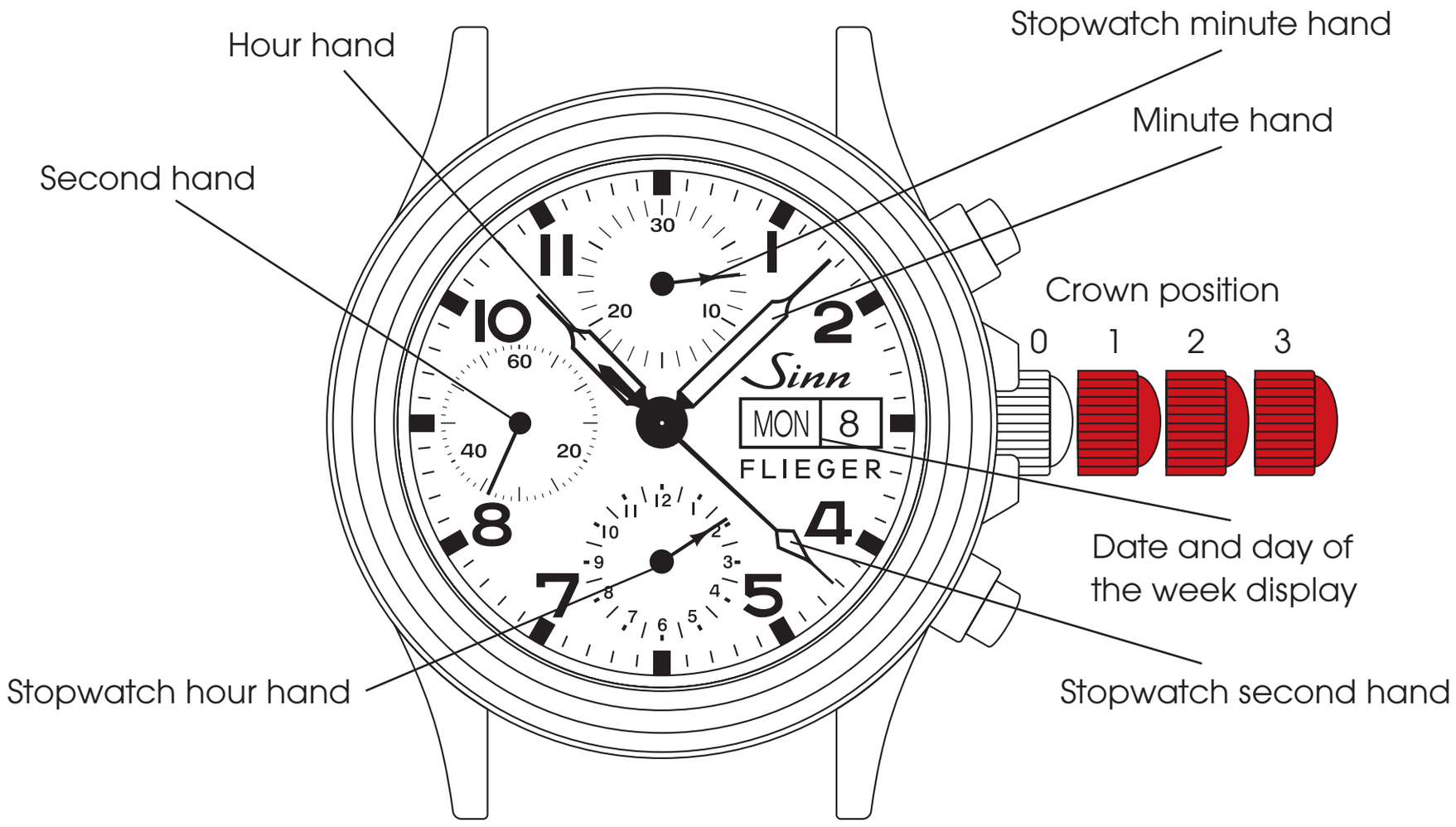
The tastefully dimensioned case with a diameter of 38.5 mm has a fine finish and gives an impression of high-quality, elegant functionality. Connoisseurs will immediately notice another subtle detail: the high-domed sapphire crystal glass used in the series has the same profile as the acrylic glass in the basic model. This sophistication has its price: in a complex process, the sapphire crystal glass must be ground out of a solid blank with a thickness of five millimetres, with five different radii of curvature. The result not only preserves the classic look of these pilot's chronographs, but the glass is also more solid, stronger and more resistant than a simple, flat-ground alternative. The anti-reflective coating on both sides facilitates accurate reading of the distinctively designed dial even under extreme lighting conditions. The 356 PILOT is also available with a high-domed sapphire crystal glass.

The high-quality seal of the crown, push-pieces, case back and glass makes the 356 series water-resistant in accordance with DIN 8310 and pressure-resistant to 10 bar.

Image: 356 Sa PILOT II

INSTRUCTIONS FOR USE

356 Sa PILOT II/356 Sa PILOT III/356 Sa PILOT/356 PILOT



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.

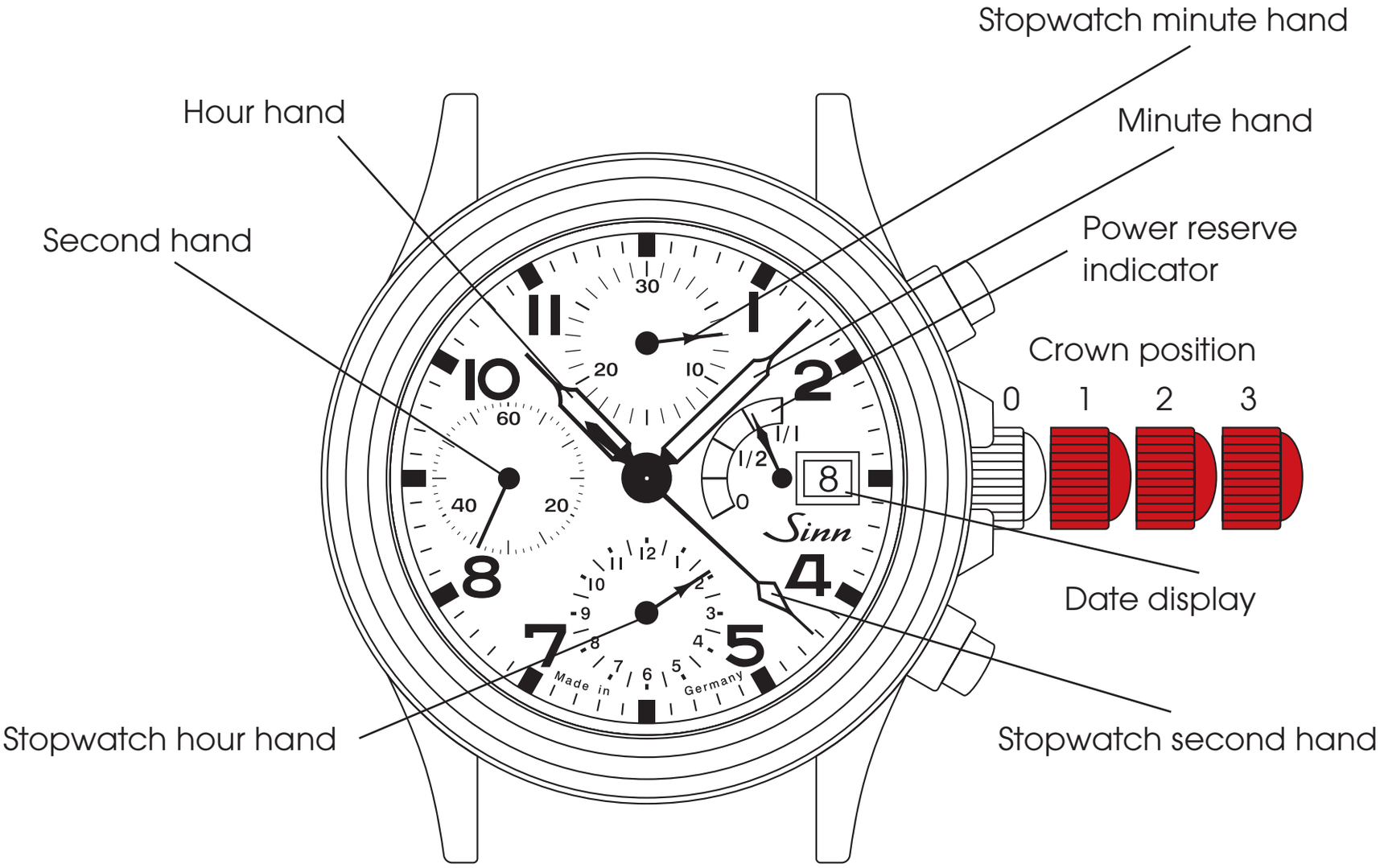
Time adjustment (crown position 3)
In crown position 3, the motion is paused. This helps you to set the watch precisely. Please make sure the date changes at midnight and not at midday. Just move the hands forward until the date changes. Afterwards you attempt to set the time. We recommend moving the 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.

INSTRUCTIONS FOR USE

356 Sa 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.

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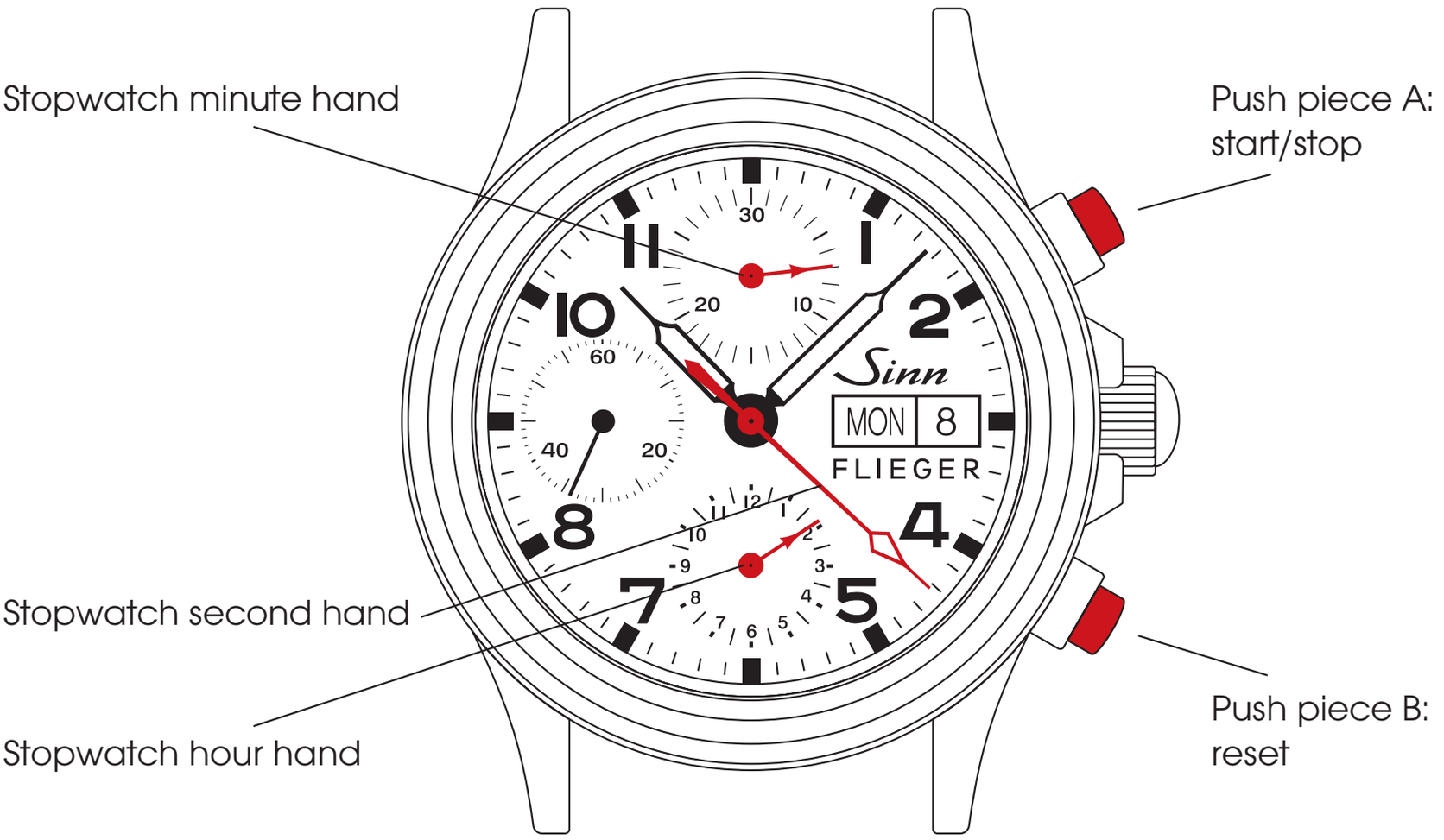
Quickset date adjustment (crown position 2)
Do not use this function between 9 p.m. and 3 a.m. Set the crown in position 2 and turn it *clockwise* until the correct date appears in the date display window. **Please do not use the date-setting function between 9 p.m. and 3 a.m.** Between these times, 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.

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).

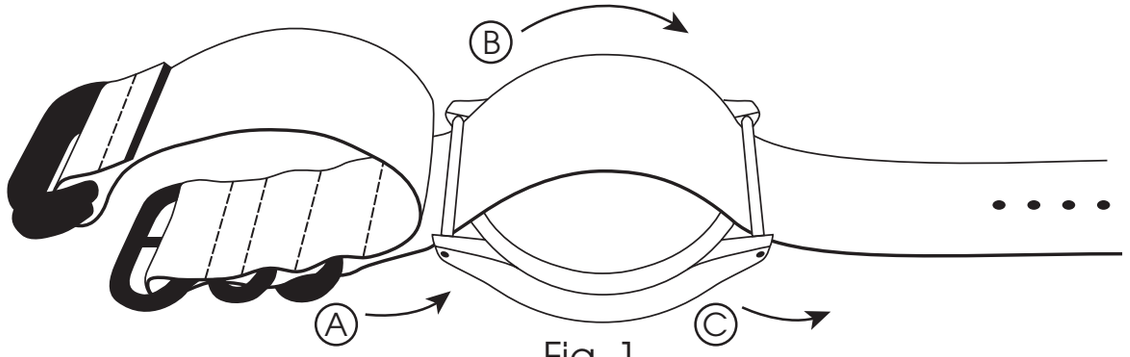


Fig. 1

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).

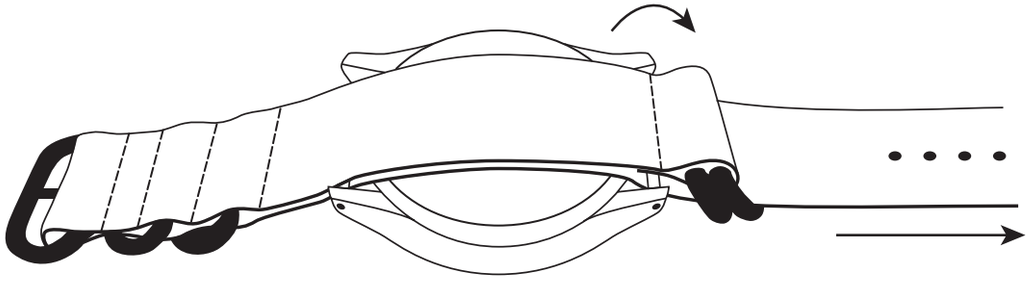


Fig. 2

Adjusting the length of the solid bracelet

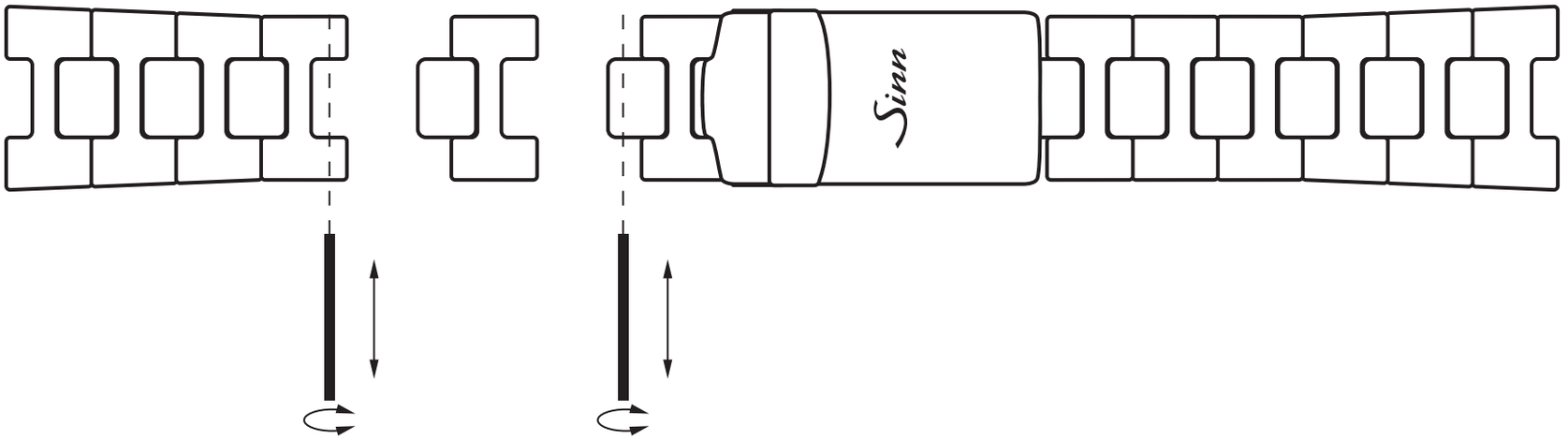
Determine the relative lengths of the two sides before adjusting the length of the bracelet. To ensure maximum comfort, both sides of the bracelet should contain the same number of links. If this is not possible, the top bracelet strap (above the 12 on the clock) should be longer.

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

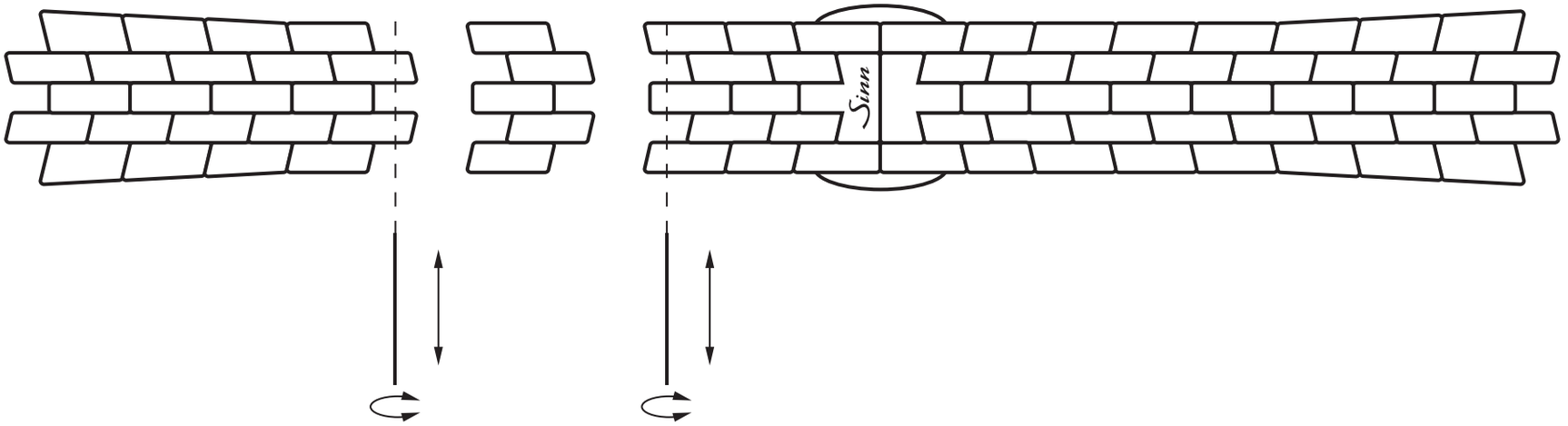
1. Loosen the screws on the side of the bracelet link which is to be removed or added.

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.

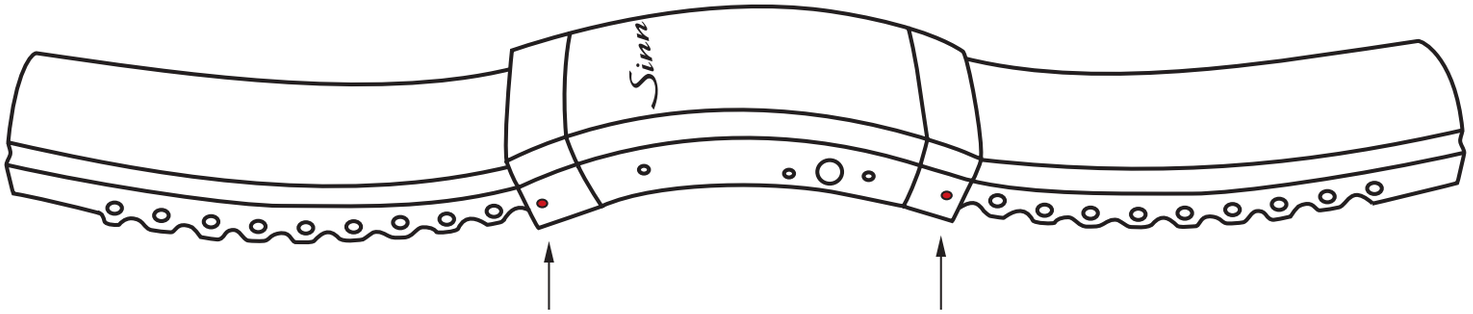


Fine link bracelet **optional** for 356 Sa PILOT II, 356 Sa PILOT III, 356 Sa PILOT, 356 Sa GR

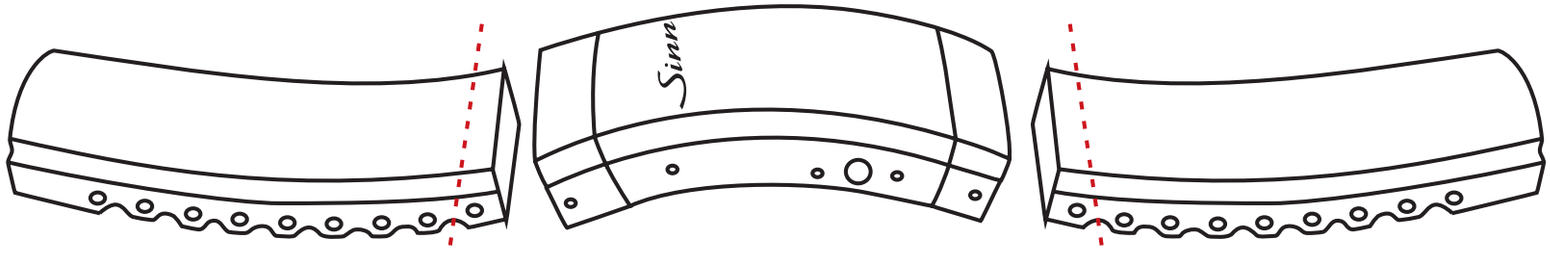


Adjusting the length of the silicone strap

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.



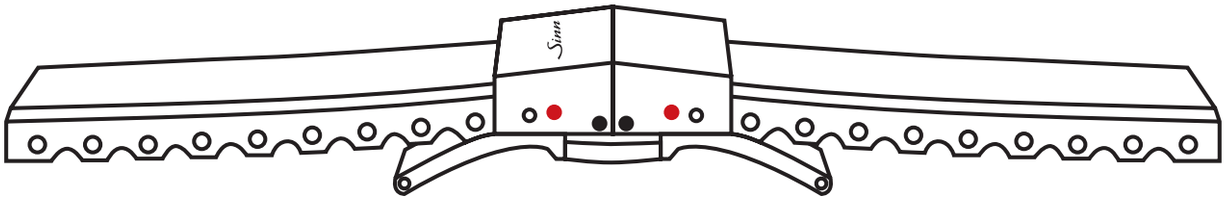
2. Using a knife or scissors, cut the silicone band in the middle between two metal pins. You should shorten the band symmetrically and little by little, starting from the clasp, until you have reached the desired length. Test the length from time to time before proceeding. Shortening both ends by the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

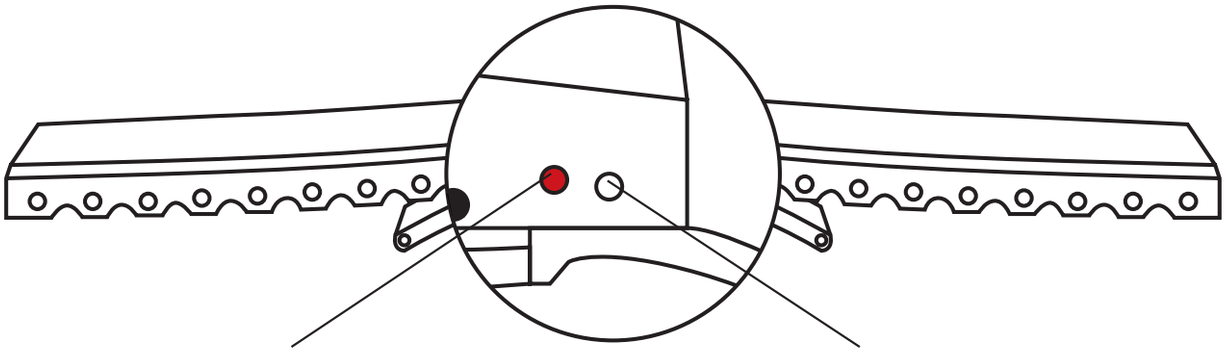


3. Remove the first metal pin and replace it with the spring bar. Then reattach the clasp to the band.

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".

Luminous

TECHNICAL DETAILS 356 Sa PILOT

Mechanical Movement

- SW 500
- Self-winding mechanism
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Hand adjustment with stop-second function
- Shock resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Case

- Case made of stainless steel, satinized
- 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
- Crown screwable
- Meet the technical requirements for waterproofness, as set out in standard DIN 8310
- Pressure-resistant up to 10 bar
- Low pressure resistant
- Case diameter 38,5 mm
- Band lug width 20 mm

Functions

- Hours, minutes, subsidiary seconds
- Date display
- Day of the week display
- Chronograph

Dial and Hands

- Matte black dial
- Numbers coated with luminescent colour
- Hour, minute and stopwatch second hand coated with luminescent colour

Luminous

TECHNICAL DETAILS 356 PILOT

Mechanical Movement

- SW 500
- Self-winding mechanism
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Hand adjustment with stop-second function
- Shock resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Case

- Case made of stainless steel, bead-blasted
- Acrylic glass in front
- Case back screw-fastened
- Crown screwable
- Meet the technical requirements for waterproofness, as set out in standard DIN 8310
- Pressure-resistant up to 10 bar
- Low pressure resistant
- Case diameter 38,5 mm
- Band lug width 20 mm

Functions

- Hours, minutes, subsidiary seconds
- Date display
- Day of the week display
- Chronograph

Dial and Hands

- Matte black dial
- Numbers coated with luminescent colour
- Hour, minute and stopwatch second hand coated with luminescent colour

Luminous

TECHNICAL DETAILS 356 Sa PILOT II, 356 Sa PILOT III

Mechanical Movement

- SW 500
- Self-winding mechanism
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Hand adjustment with stop-second function
- Shock resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Case

- Case made of stainless steel, satinized
- 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
- Crown screwable
- Meet the technical requirements for waterproofness, as set out in standard DIN 8310
- Pressure-resistant up to 10 bar
- Low pressure resistant
- Case diameter 38,5 mm
- Band lug width 20 mm

Functions

- Hours, minutes, subsidiary seconds
- Date display
- Day of the week display
- Chronograph

Dial and Hands

- 356 Sa PILOT II: Electroplated, copper-coloured guilloché dial
- 356 Sa PILOT III: Silver electroplated guilloché dial
- Indices coated with luminescent colour
- Hour, minute and stopwatch second hand coated with luminescent colour

Luminous

TECHNICAL DETAILS 356 Sa GR

Mechanical Movement

- 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 8308
- Anti-magnetic as per DIN 8309

Case

- Case made of stainless steel, satinized
- 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
- Crown screwable
- Meet the technical requirements for waterproofness, as set out in standard DIN 8310
- Pressure-resistant up to 10 bar
- Low pressure resistant
- Case diameter 38,5 mm
- Band lug width 20 mm

Functions

- Hours, minutes, subsidiary seconds
- Date display
- Power reserve indicator
- Chronograph

Dial and Hands

- Matte black dial
- Numbers and indices coated with luminescent colour
- Hour, minute and stopwatch second hand coated with luminescent colour

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)69 978 414 400
Telefax: + 49 (0)69 978 414 401
E-mail: kundendienst@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 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

3. Auflage / 3rd Edition
03 2017

Technische Änderungen vorbehalten.
Technical specifications are subject to changes.

Abbildung: 356 FLIEGER
Image: 356 PILOT

Abbildung: 356 Sa FLIEGER III
Image: 356 Sa PILOT III