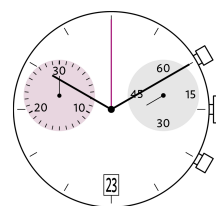


RONDA xtratech Z Series

13¼''' Chronos with 2 & 3 eyes

Caliber Z50 – 13¼'''



Product Specifications

Analog quartz movement

Line xtratech

Caliber Z50

Size 13¼'''

Version Swiss Made 0 Jewels / nickel plated
Swiss Parts 0 Jewels / nickel plated

Standard battery life 50 months

Hand fitting height 1

Features

- Very long battery life
- Repairable movement with metal main plate and bridges
- Power saving mechanism with pulled out stem: Reduction of consumption approximately 70%
- Very easy handling by two pushers

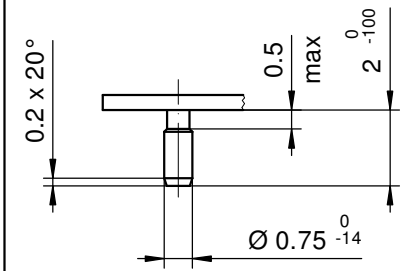
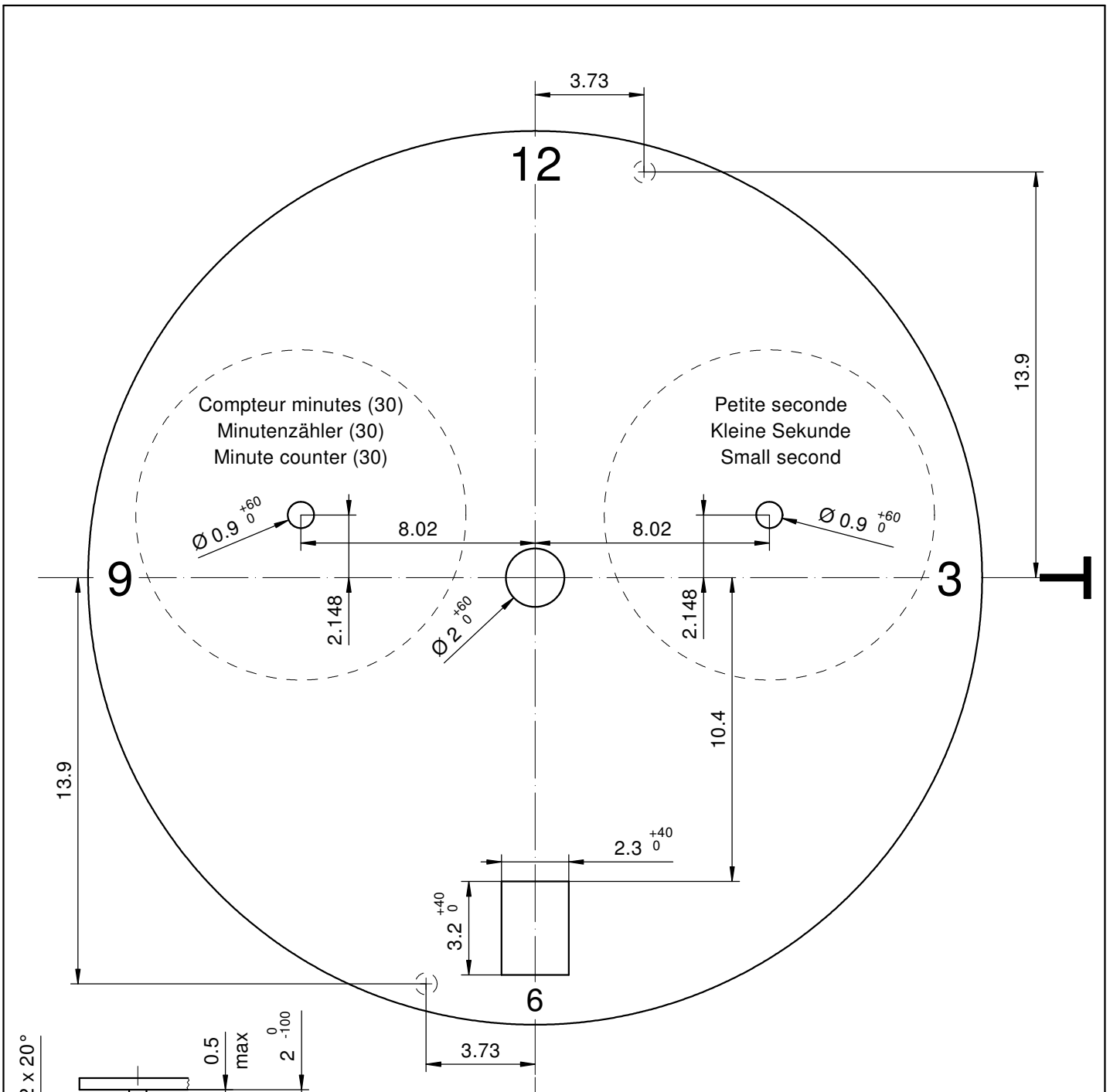
Functions

- Chronograph
- Center stop second (1/1 sec)
- 30 minute counter
- ADD and SPLIT functions
- Small second
- Date

Technical Specifications

Diameter Total	30.60 mm
Case fitting	30.00 mm
Movement height	4.60 mm
Height over standard battery	4.60 mm
Movement rest	1.37 mm
Height over stem	1.75 mm
Length of stem travel	1.00 mm
Stem thread	0.90 mm
Standard battery	395
Standard battery life	50 months
Battery voltage	1.5 V
Current consumption – typical	1.42 µA (Date Mechanism not in Gear)
Current consumption – maximum	3 µA (Date Mechanism not in Gear)
Useful torque second – typical	6 µNm
Useful torque minute – typical	300 µNm
Useful torque center stop second – typical	6 µNm
Operating temperature	0 - 50 °C
Instantaneous rate	-10/ +20 sec/month
Resistance to magnetic fields	18.8 Oe
Resistance against shock	NIHS 91-10

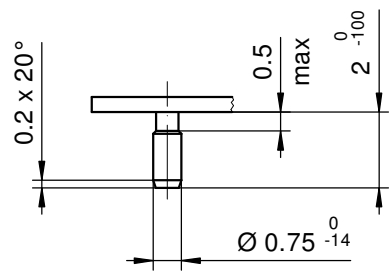
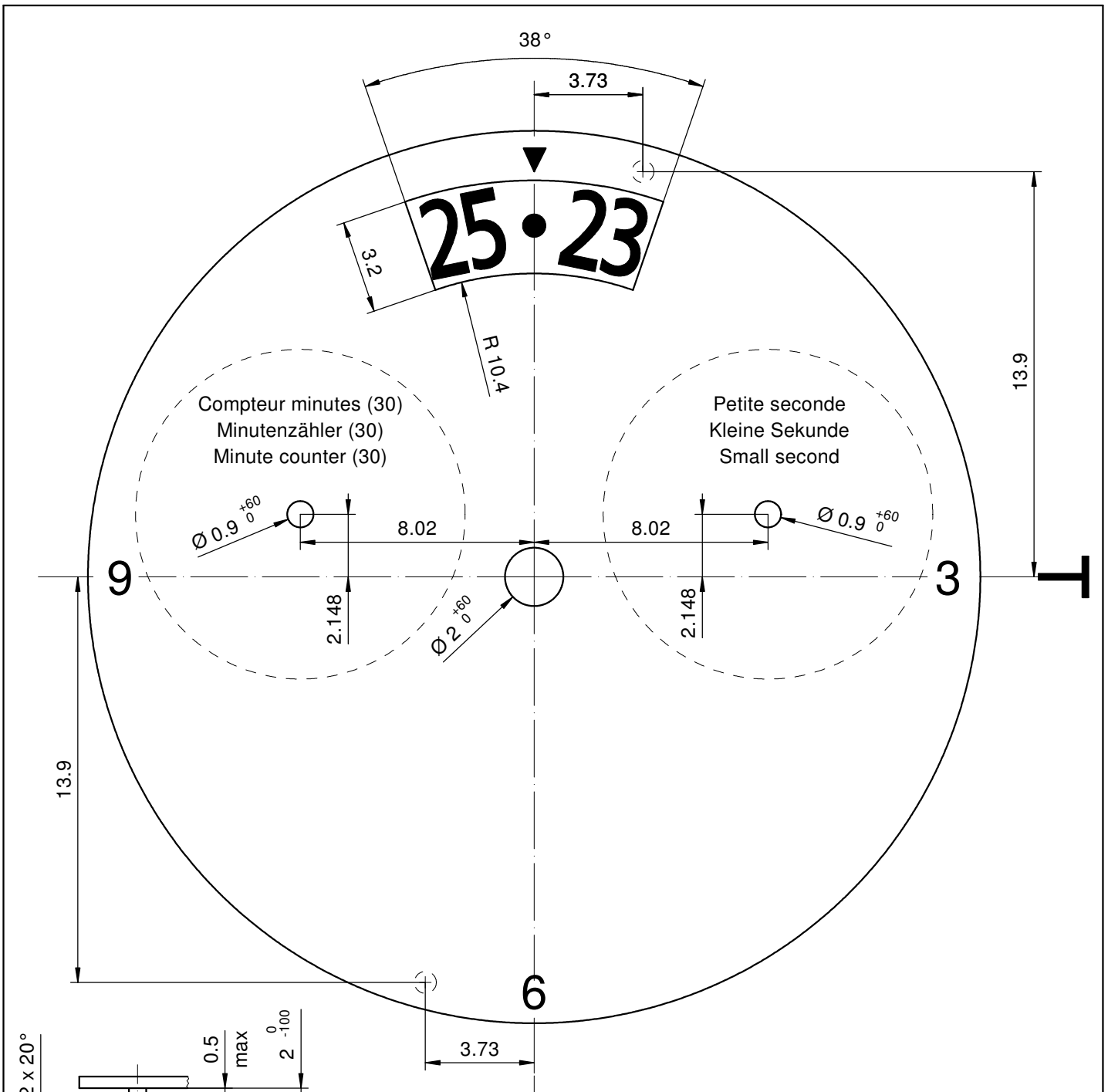




Tige	Date
Stellw.	Datum
Stem	Date
3H	6H

Epaisseur du cadran selon hauteur de l'aiguillage
 Zifferblattdicke gemäss Zeigerwerkhöhen
 Dial thickness according to hand fitting heights

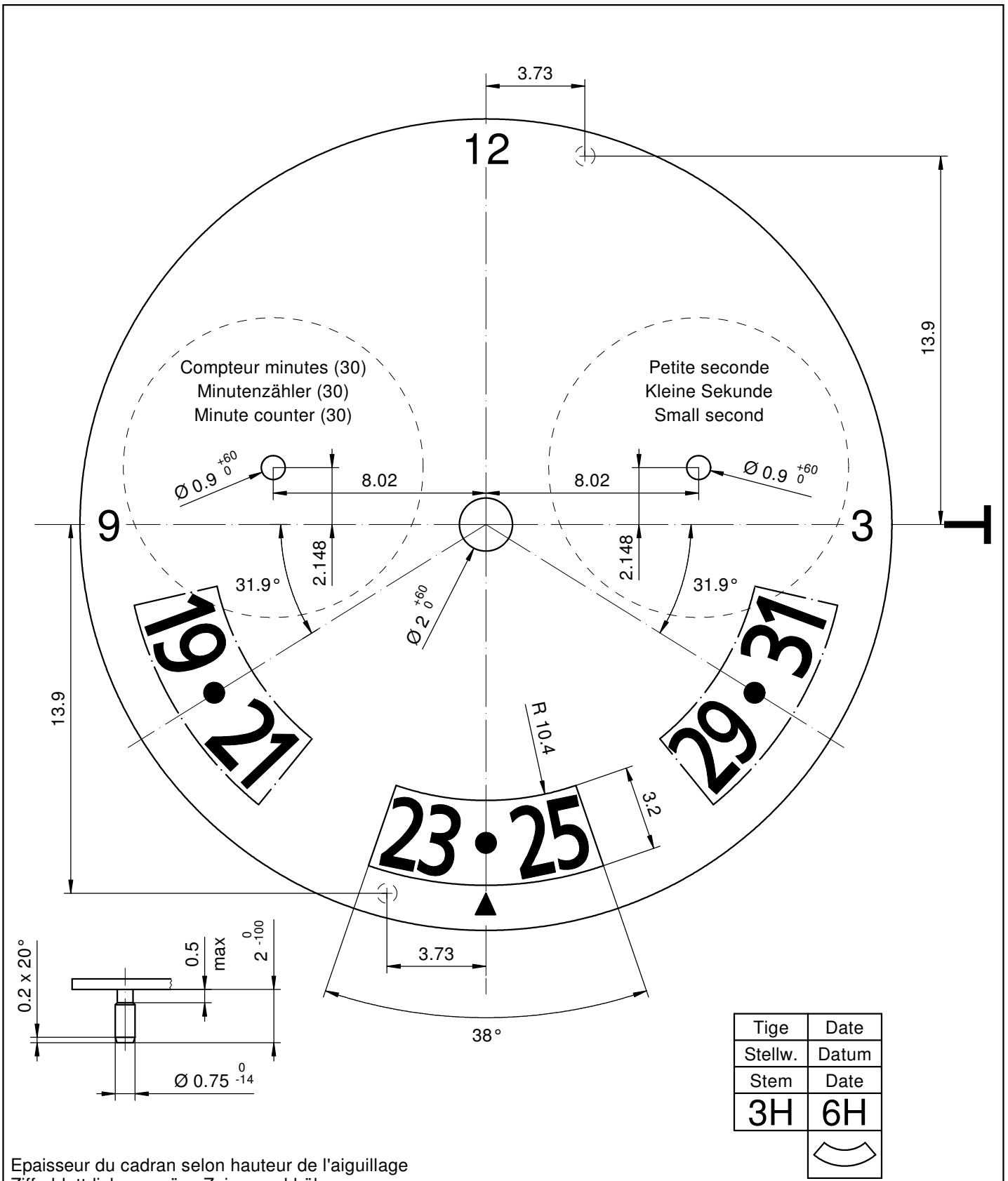
Cadran Zifferblatt 13 1/4" Dial	Issued	14 Mai 2014	mk
	Modified	22 Mär 2017 ÄA 35959	di
	Released	Yes	
	Tolerance	+/- 20 µm	
	Scale	5 : 1 (A4V)	
RONDA	Z 50	Sous réserve de modification Änderungen vorbehalten Modifications reserved	
		No.	5010.728



Tige	Date
Stellw.	Datum
Stem	Date
3H	12H

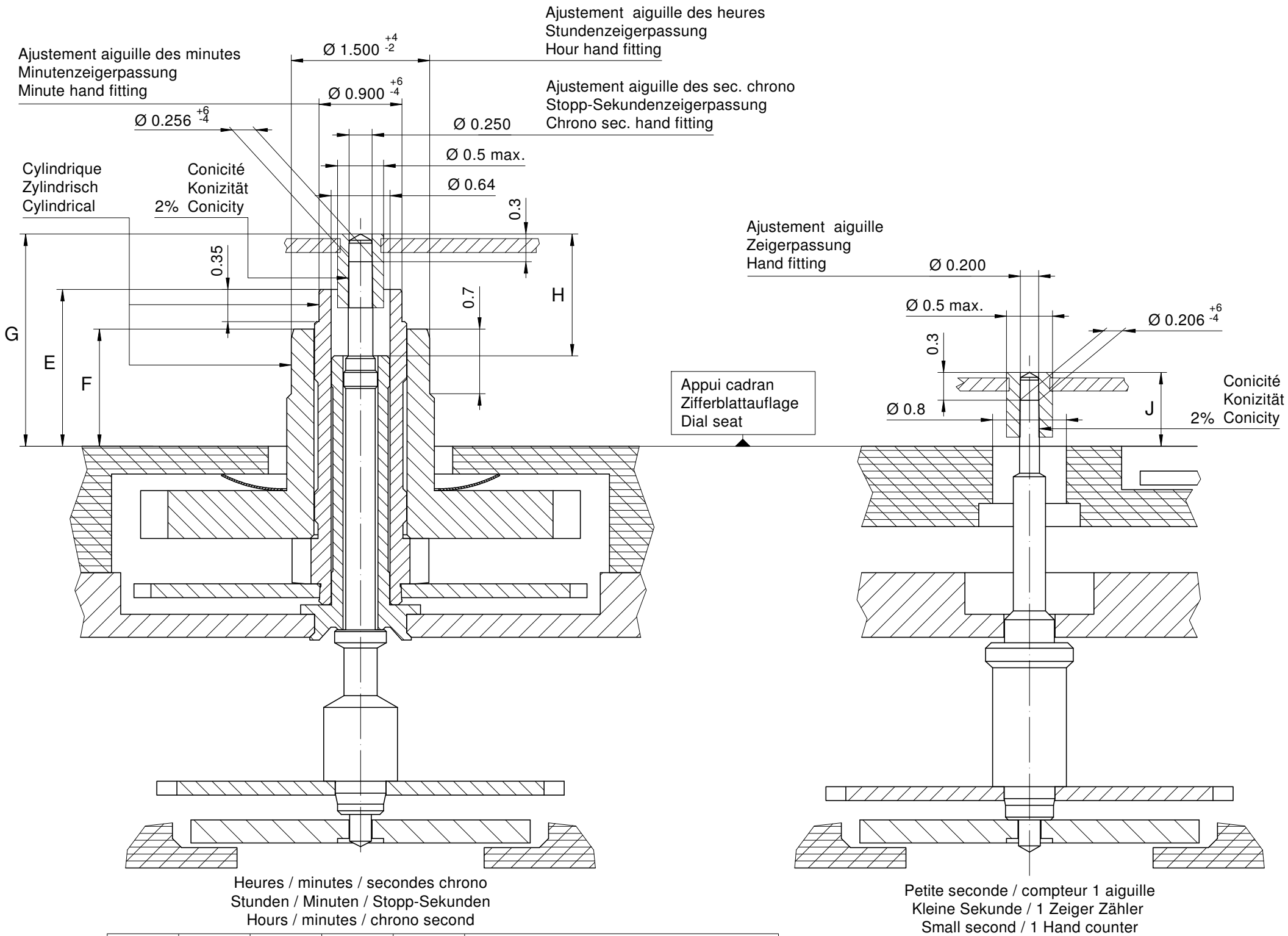
Epaisseur du cadran selon hauteur de l'aiguillage
 Zifferblattdicke gemäss Zeigerwerkhöhen
 Dial thickness according to hand fitting heights

Cadran Zifferblatt 13¼" Dial	Issued	23 Sep 2015	di
	Modified	22 Mär 2017 ÄA 35959	di
	Released	Yes	
	Tolerance	+/- 20 µm	
	Scale	5 : 1 (A4V)	
RONDA	Z 50	Sous réserve de modification Änderungen vorbehalten Modifications reserved	
		No.	5010.761



Epaisseur du cadran selon hauteur de l'aiguillage
Zifferblattdicke gemäss Zeigerwerkhöhen
Dial thickness according to hand fitting heights

<p>Cadran Zifferblatt 13¼" Dial</p>	Issued	23 Sep 2015	di
	Modified	22 Mär 2017 ÄA 35959	di
	Released	Yes	
	Tolerance	+/- 20 µm	
	Scale	5 : 1 (A4V)	
<p>RONDA</p>	<p>Z 50</p>	<p>Sous réserve de modification Änderungen vorbehalten Modifications reserved</p>	
		No.	5010.770



Heures / minutes / secondes chrono
 Stunden / Minuten / Stopp-Sekunden
 Hours / minutes / chrono second

Petite seconde / compteur 1 aiguille
 Kleine Sekunde / 1 Zeiger Zähler
 Small second / 1 Hand counter

Aiguillages Zeigerwerkhöhe Hand fitting height						
Dépassement Höhe über Zifferblattauflage Height over dial seat						
No	G	E	F	H	J	J
1	2.30	1.70	1.27	1.32	0.80	0.80

Aiguillages Zeigerwerkhöhe Hand fitting height						
Peinture comprise / inkl. Farbe / Paint included						
Epaisseur maximum du cadran Maximale Zifferblattdicke Maximum dial thickness						
No	Sous l'aiguille des secondes chrono Unter Stopp-Sekundenzeiger Under chrono second hand	Sous l'aiguille des minutes Unter Minutenzeiger Under minute hand	Sous l'aiguille des heures Unter Stundenzeiger Under hour hand	Sous l'aiguille de petite seconde Unter kleine Sekundenzeiger Under small second hand	Sous l'aiguille compteur 1 aiguille Unter Zeiger 1 Zeiger Zähler Under hand 1 hand counter	Epaisseur des aiguilles Zeigerdicke Hands thickness
1	1.80	1.30	0.85	0.40	0.40	0.15

	Aig. des sec. chrono Stopp-Sekundenzeiger Chrono second hand	Aig. des minutes Minutenzeiger Minute hand	Aig. des heures Stundenzeiger Hour hand	Aig. petite secondes Kleine Sekundenzeiger Small second hand	Aiguille compteur (1 aig.) Zähler Zeiger (1 Zeiger) Counter hand (1 hand)	Lors de la pose d'aiguilles, le mouvement doit être soutenu. Beim Zeigersetzen muss das Werk abgestützt werden. The movement needs to be supported for hand setting.
mg max.	10	30	30	10	10	Masse / Masse / Weight *
µNm max.	0.06	0.70	0.70	0.06	0.03	Balourd / Unwucht / Unbalance *
gmm ² max.	1.0	-	-	0.4	1.0	Inertie / Massenträgheit / Inertia *
N max.	30	40	40	30	30	Force de chassage / Aufpresskraft / Force

Aiguillages Zeigerwerkhöhen 13¼"

Hand fitting heights

	Issued	14 Mai 2014	mk
	Modified	31 Mär 2015 ÄA 13825	mk
	Released	Yes	
	Tolerance	µm	
	Scale	20 : 1 (A3H)	
Sous réserve de modifications Änderungen vorbehalten Modifications reserved			
RONDA	Z 50	No. 3316.153	00

* En cas de données différentes, veuillez contacter le service après-vente

* Bei abweichenden Werten, bitte technischen Kundendienst anfragen

* In case of different values, please contact the customer service



Movement holder
Removing setting stem
HZXX.1T



Movement holder
Setting hands
HZXX.2A

Fitting dial and hands

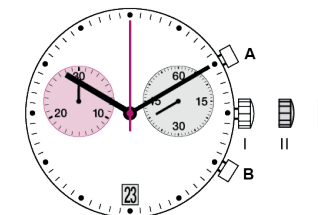
- Crown in position III
- Wind hour hand forwards, until date changes
- Remove working hand
- Fit dial
- Place all hands towards 12 o'clock
- Wind hand forwards to set actual time
- Zero chronograph hand*
- Crown in position II
- Set date
- Crown in position I

Date switching duration:

~1¼hrs

*Zeroing the Chronograph hand

- Press pushers A and B for 2 seconds at the same time
(Chrono seconds hand rotates once)
- Pusher A - to correct chrono seconds hand
- Pusher B - to jump to minute hand
- Pusher A - to correct hand position



General Instructions

Removing the setting stem can only be effected in Pos. I.

The use of supporting screws is essential when mounting the hands.

Permitted hand setting strengths:

Hr / min. hands: <40N

Other hands: <30N

During quick date correction (setting stem in position II), a date switching speed of 5 d/s must not be exceeded.

Complement for T2 instructions Z50/Z60

It might be possible that the date jump will not be finalized when the date is set manually. In that case the movement will be adjusted automatically at the next date jump.

You have decided to buy a watch, which was assembled by a watchmaker using a Ronda movement. Please note that no watches are produced or distributed under the Ronda brand.

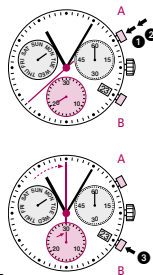
In case of repairs, guarantee claims and questions concerning the functioning of a watch, purchasers and consumers should contact their retailer or the watch manufacturer, for which the relevant information can be found in the sales or guarantee documentation provided with the watch.

Chronograph: Basic function

(Start / Stop / Reset)

Example:

- Start:** Press push-button A.
- Stop:** To stop the timing, press push-button A once more and read the chronograph counters: **20 min / 38 sec**
- Zero positioning:** Press push-button B. (The chronograph hands will be reset to their zero positions.)



05

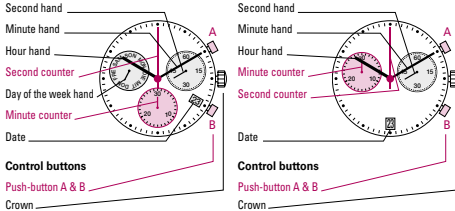
Description of the display and control buttons

Display elements

Z60

Display elements

Z50



01

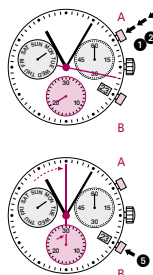
Chronograph: Accumulated timing

Example:

- Start:** (start timing)
- Stop:** (e.g. 15 min 5 sec following 1)
- Restart:** (timing is resumed)
- Stop:** (e.g. 5 min 12 sec following 3) = **20 min 17 sec** (The accumulated measured time is shown)
- Reset:** The chronograph hands are returned to their zero positions.

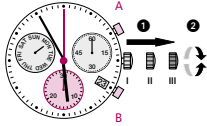
Please note:

- Following 4, the accumulation of the timing can be continued by pressing push-button A (Restart / Stop, Restart / Stop, ...).

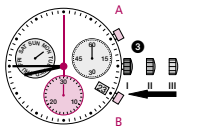


06

Setting the time



- * Pull out the crown to position III (the watch stops).
- Turn the crown until you reach the correct time 8:45.



- * Push the crown back into position I.

Please note:

- * In order to set the time to the exact second, 1 must be pulled out when the second hand is in position «60». Once the hour and minute hands have been set, 2 must be pushed back into position I at the exact second.

02

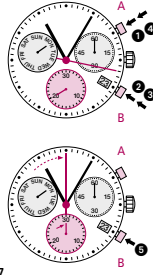
Chronograph: Intermediate or interval timing

Example:

- Start:** (start timing)
- Display interval:** e.g. 20 minutes 17 seconds (timing continues in the background)
- Making up the measured time:** (the chronograph hands are quickly advanced to the ongoing measured time).
- Stop:** (Final time is displayed.)
- Reset:** The chronograph hands are returned to their zero position

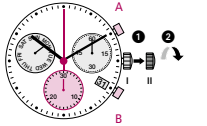
Please note:

- * Following 2, further intervals or intermediates can be displayed by pressing push-button B (display interval / make up measured time, ...).

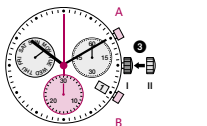


07

Setting the date (quick mode)



- Pull out the crown to position II (the watch continues to run).
- Turn the crown anticlockwise until the correct date [] appears.



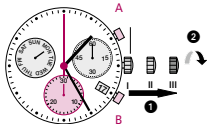
- Push the crown back into position I.

Please note:

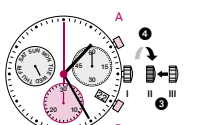
- During the date changing phase between approx. 09:45 PM and 12 PM, the date must be set to the date of the following day.

03

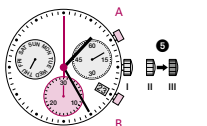
Setting the date, day of the week (Z60) and time



- Example:
- Date / time on the watch: 17 / 01:25 / MON
- Present date / time: 23 / 20:35 / THU



- Pull out the crown to position III (the watch stops).
- Turn the crown anticlockwise until yesterday's day of the week WED appears.
- Push the crown to position II.
- Turn the crown until yesterday's date appears 22.



- * Pull out the crown to position III (the watch stops).
- Turn the crown anticlockwise until the correct date 23 and day of the week THU appears.
- * Continue to turn the crown anticlockwise until the correct time 8:35 PM appears.
- Push the crown back into position I.

Please note:

- * To set your watch to the exact second, please refer to the chapter entitled «setting the time».
- ** Please observe the AM/PM clock rhythm.

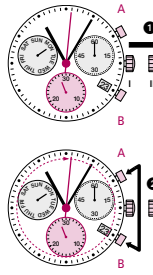
04

Adjusting the chronograph hands to zero position

Example:

- One or several chronograph hands are not in their correct zero positions and have to be adjusted (e.g. following a battery change).

- Pull out the crown to position III (all chronograph hands are in their correct or incorrect zero position.)
- Keep push-buttons A and B depressed simultaneously for at least 2 seconds (the second counter hand rotates by 360° → corrective mode is activated.)



Adjusting the second counter hand

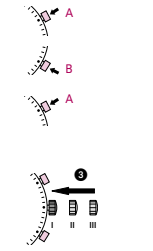
- Single step: A 1 x short
- Continuous: A long

Adjusting the next hand B

- Single step: A 1 x short
- Continuous: A long

Adjusting the minute counter hand (position 6h)

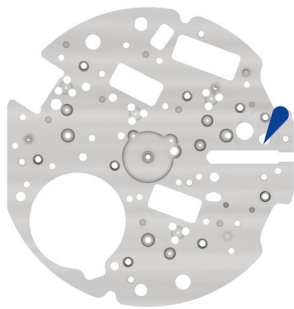
- Single step: A 1 x short
- Continuous: A long





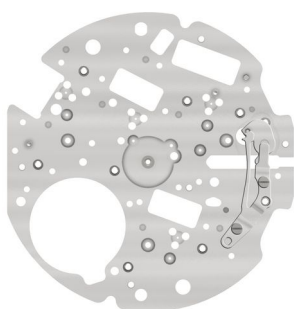
- Returning the crown to position I
Termination of the chronograph hands adjustment (can be carried out at any time).





08

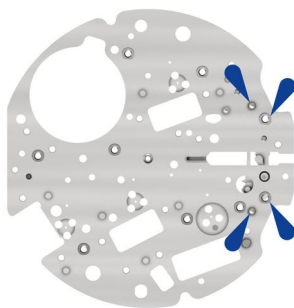





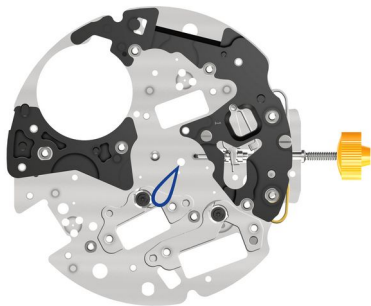
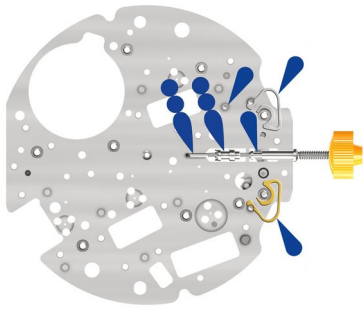
- | | | | |
|---|---|----------|--------------|
| 1 |  | 2000.717 | Main plate |
| 2 |  | 8200 | Moebius 8200 |


















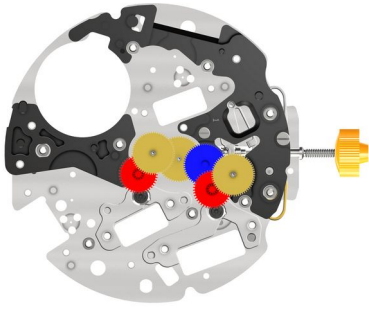
- | | | | |
|---|---|-------------|--|
| 3 |  | 3017.064.CO | Setting lever |
| 4 |  | 3905.083 | Setting lever jumper
Tensioning the spring arm. |
| 5 |  | 4000.342 | Screw |
| 6 |  | 4000.342 | Screw |

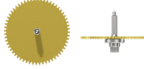
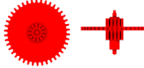

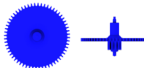
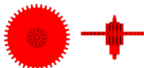



- | | | | |
|---|---|------|--------------|
| 7 |  | 8200 | Moebius 8200 |
|---|---|------|--------------|








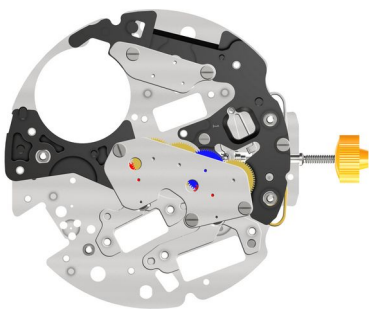
- | | | | |
|----|---|-------------|---|
| 8 |  | 3406.043 | Pusher jumper A
Put the yellow jumper between the two pillars. |
| 9 |  | 3406.042 | Pusher jumper B
Put the grey jumper between the two pillars. |
| 10 |  | 3000.208.CO | Working stem (dual) L22mm |
| 11 |  | 3001.072.FI | Sliding pinion |
| 12 |  | 8200 / 9020 | Moebius 8200 / Moebius 9020
4x Moebius 8200 / 2x Moebius 9020 |
| 13 |  | 3016.034 | Stop lever |
| 14 |  | 3603.098 | Electronic modul support |
| 15 |  | 4000.248 | Screw |
| 16 |  | 4000.343 | Screw |
| 17 |  | 3603.101 | Battery support |
| 18 |  | 3622.070 | Stator |
| 19 |  | 3622.071 | Stator (counter) |
| 20 |  | 3715.132.RK | Rotor |
| 21 |  | 3715.132.RK | Rotor |
| 22 |  | 9014 | Moebius 9014 |






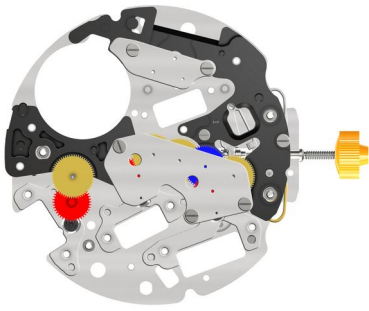
23		3122.073.CO	Third wheel
24		3147.089	Intermediate wheel
25		3136.215.CO	Chronograph wheel (Aig.)
26		3136.214	Second wheel (Aig.)
27		3147.089	Intermediate wheel
28		3136.216.CO	Small second wheel (Aig.)





29		2020.210.M01.Z50	Train wheel bridge
30		4000.248	Screw
31		4000.248	Screw
32		4000.248	Screw
33		9014	Moebius 9014

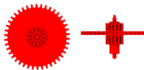


34		2020.211	Counter train wheel bridge
35		4000.248	Screw
36		4000.248	Screw

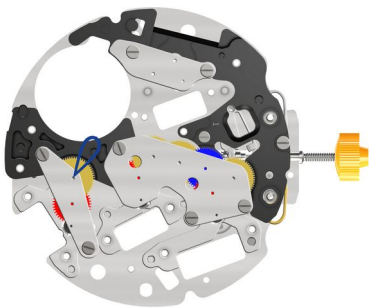



37  3622.071 Stator (counter)


38  3715.132.RK Rotor

39  3147.089 Intermediate wheel

40  3136.216.CO Small second wheel (Aig.)

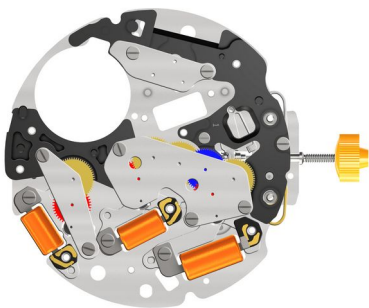



41  2020.219 Counter train wheel bridge

42  4000.248 Screw


43  4000.248 Screw


44  9014 Moebius 9014



45  3621.078.RK Coil
Attention: Please hold the coil only on the grey coil core.

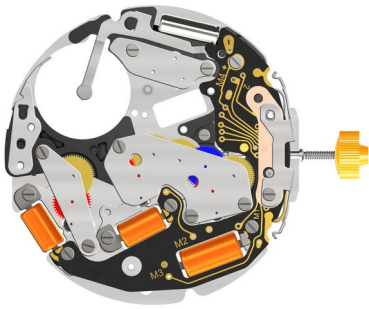
46  3621.054.RK Coil
Attention: Please hold the coil only on the grey coil core.











47  3621.054.RK Coil
Attention: Please hold the coil only on the grey coil core.

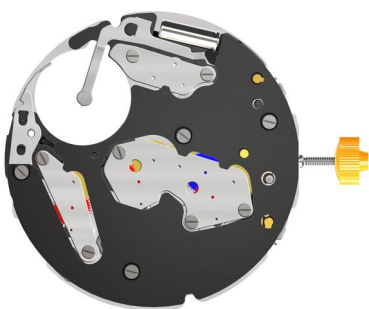
48  4000.248 Screw






49  4000.248 Screw

50  4000.248 Screw




51		3601.153	Bridle -
52		3612.256	Electronic module
53	 1:2	4000.341	Screw
54	 1:2	4000.341	Screw
55	 1:2	4000.341	Screw
56	 1:2	4000.341	Screw
57		3603.102	Circuit insulator
58		3601.151	Contact spring for pusher
59		4000.248	Screw
60		3601.159	Lateral bridle




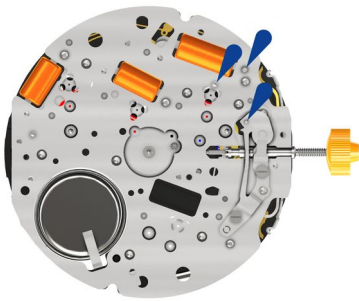
61		2130.248	Electronic module cover
62		4000.248	Screw
63	 1:2	4000.341	Screw
64	 1:2	4000.341	Screw
65	 1:2	4000.341	Screw




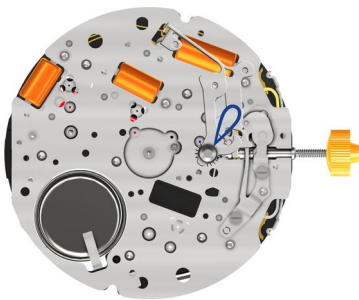
66  3600.010.HGF Battery 395 (Ø 9.50 x 2.70)


67  3601.152 Bridle +


68  4000.341 Screw
1:2





69  8200 Moebius 8200



70  3015.095 Yoke

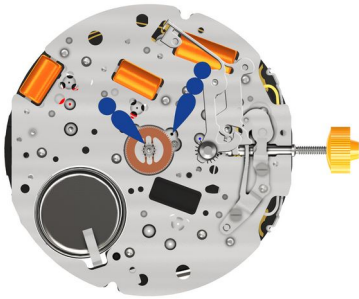
71  3015.096.CO Setting lever yoke
Tensioning the spring arm.


72  9014 Moebius 9014

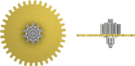
73  9020 Moebius 9020





74  3305.370.CO Cannon pinion (Aig.)



75  J124 / 9020 Jismaa 124 / Moebius 9020
1x Jismaa 124 / 1x Moebius 9020


76  3007.092.CO Minute wheel

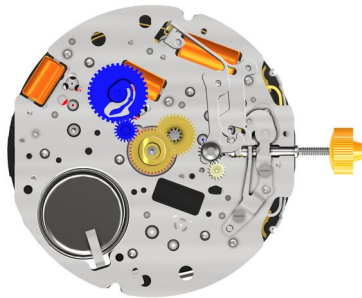
77  3301.332.TA Hour wheel (Aig.)

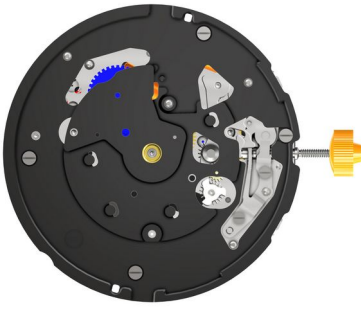
78  3315.003 Friction spring


79  3004.264 Date indicator driving wheel


80  3147.091 Intermediate date wheel


81  3004.245 Date setting wheel








82  2130.231 Setting mechanism cover

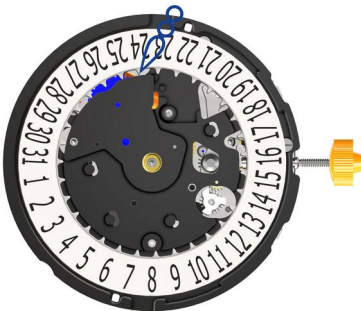
83  4000.248 Screw


84  4000.248 Screw

85  4000.248 Screw

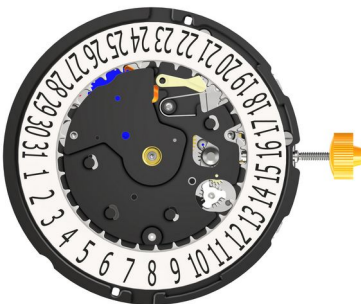
86  4000.248 Screw


87  3507.067 Date corrector




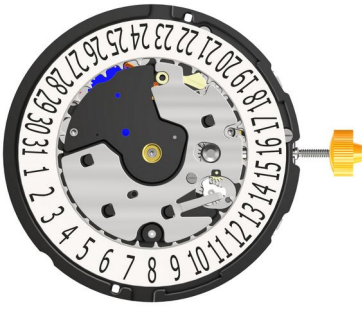
88  3504.2436.AP.3.A Date indicator



89  I-4 Moebius I-4



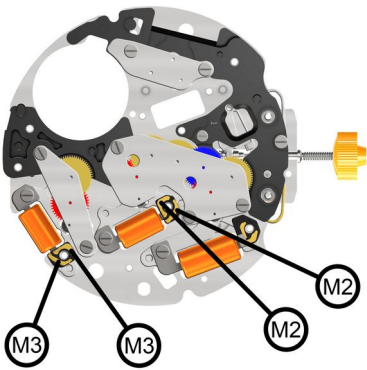
90  3500.081 Date jumper

91  3905.084 Date jumper spring
Lube and insert the spring.

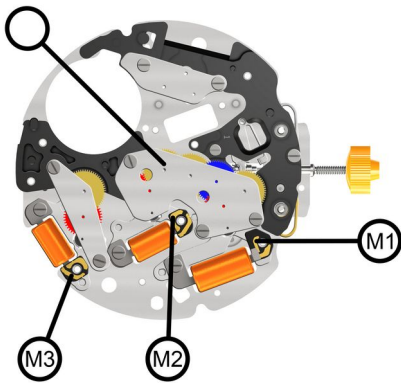


92		2130.229	Date mechanism maintaining plate
93		4000.343	Screw

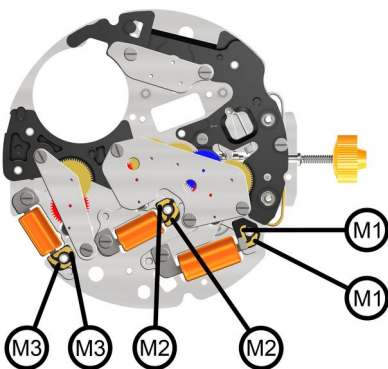
Measurement



Signal generator (4.9ms, 8Hz)
< 1.20 V



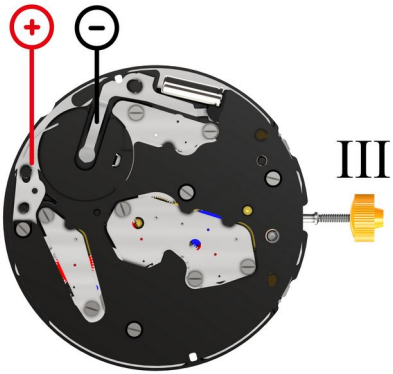
Coil insulation M2 / M3
infinite



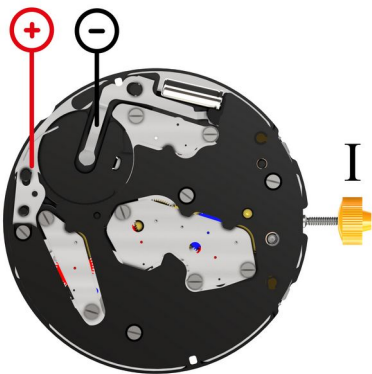
Coil condition movement
(min./max.) 1500 - 1700 Ohm (3621.078.RK)

Coil condition M2
(min./max.) 1680 - 1880 Ohm (3621.054.RK)

Coil condition M3
(min./max.) 1680 - 1880 Ohm (3621.054.RK)



Setting stem in position III, 60 s measuring interval.
(typ./max.) 0.10 / 0.30 μ A



Setting stem in position I, calendar not in gear, 60s measuring interval.

(typ./max.) 1.42 / 3 μ A

60s measuring interval.

-10 .. +20s/mth

Lower working voltage limit

<1.20 V



Battery tension

typ 1.5V (3600.010.HGF - Batterie)