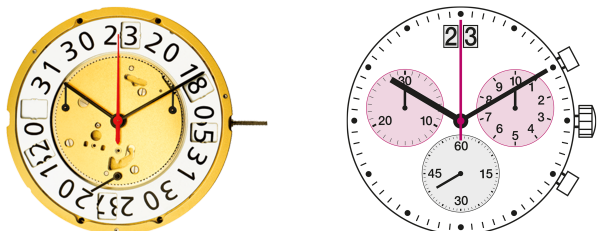


Caliber 8040.B – 15'''



Product Specifications

Analog quartz movement

Line startech

Caliber 8040.B

Size 15'''

Version Swiss Made 13 Jewels / gold plated

Standard battery life 48 months

Standard hand fitting height 1

Features

- Repairable metal watch movement
- Power saving mechanism with pulled out stem:
Reduction of consumption approximately 70%
- Very easy handling by two pushers
- Big date with quick change

Functions

- 30 minute counter
- Center stop second (1/1 sec)
- 10 hour counter
- 1/10 seconds up to 30 minutes
- ADD and SPLIT functions
- Chronograph
- Big date
- Small second

Quartz Movements

Chronographs

RONDA startech

Caliber 8040.B – 15'''

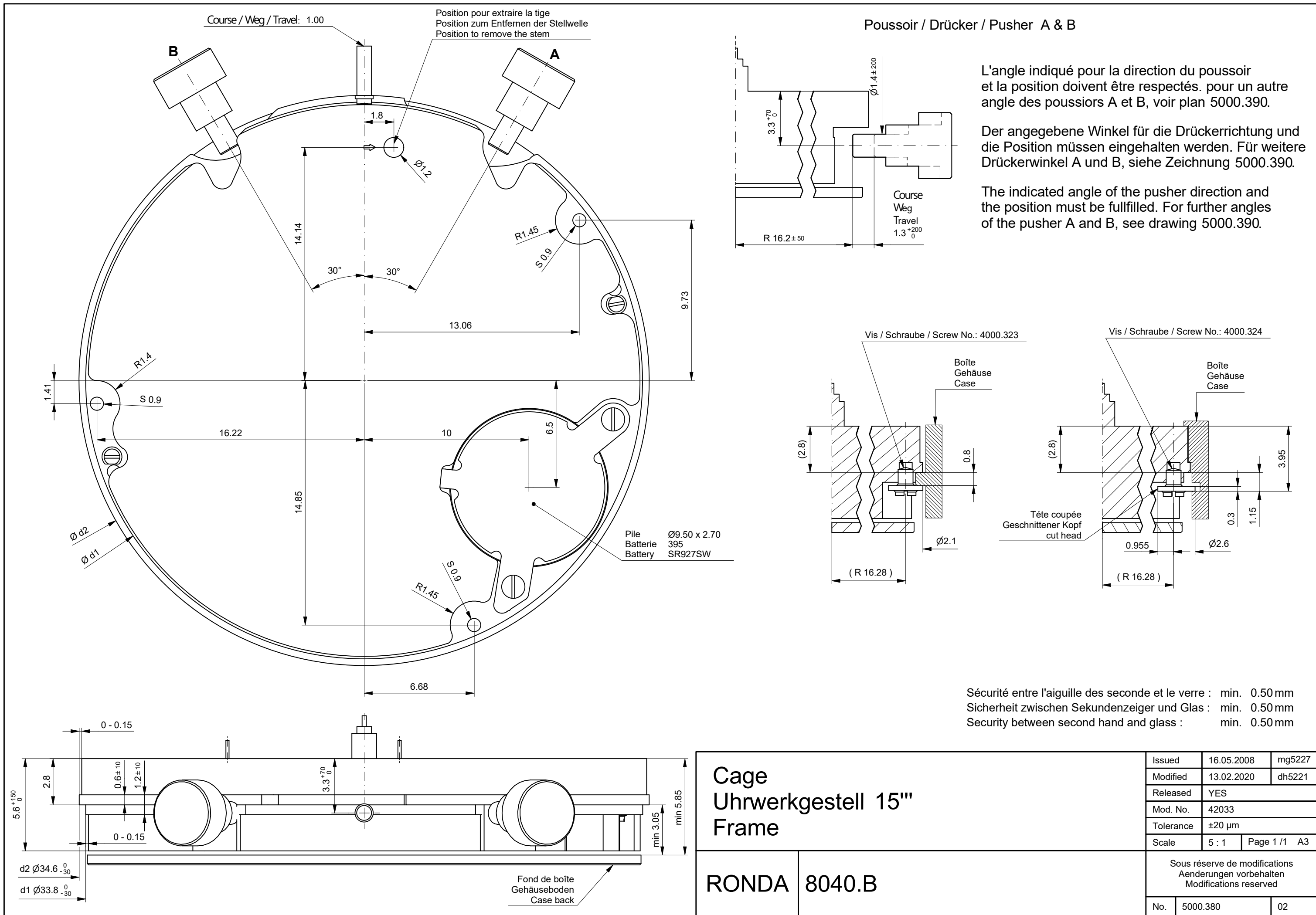
Technical Specifications

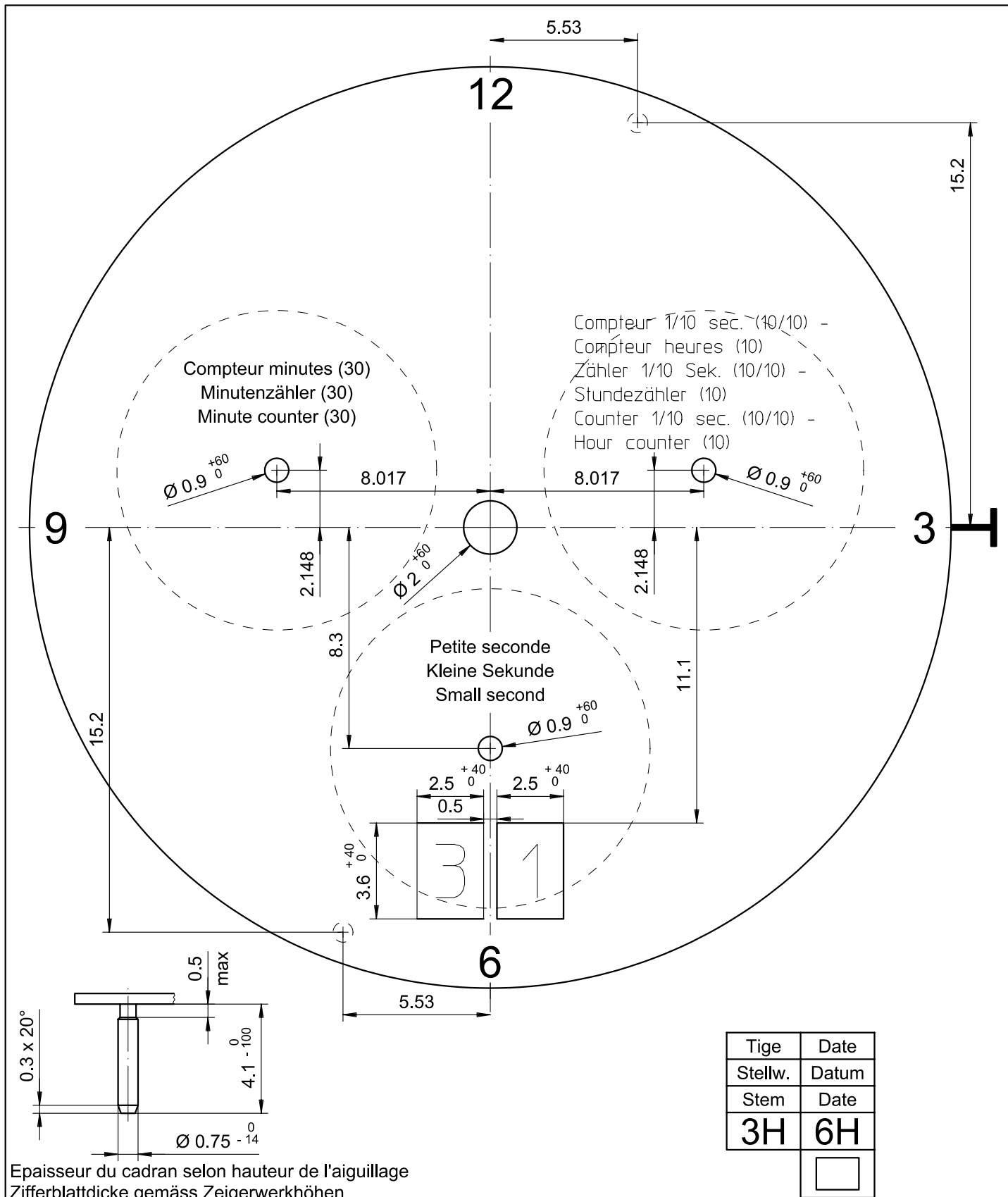
Diameter Total	34.60 mm
Case fitting	33.80 mm
Movement height	5.60 mm
Height over standard battery	5.60 mm
Movement rest	0.60 mm
Height over stem	3.30 mm
Length of stem travel	1.00 mm
Stem thread	0.90 mm
Useful torque second – typical	6 μ Nm
Useful torque minute – typical	300 μ Nm
Useful torque center stop second – typical	7 μ Nm
Operating temperature	0 - 50 °C
Instantaneous rate	-10/ +20 sec/month
Resistance to magnetic fields	18.8 Oe
Resistance against shock	NIHS 91-10



Battery Specifications

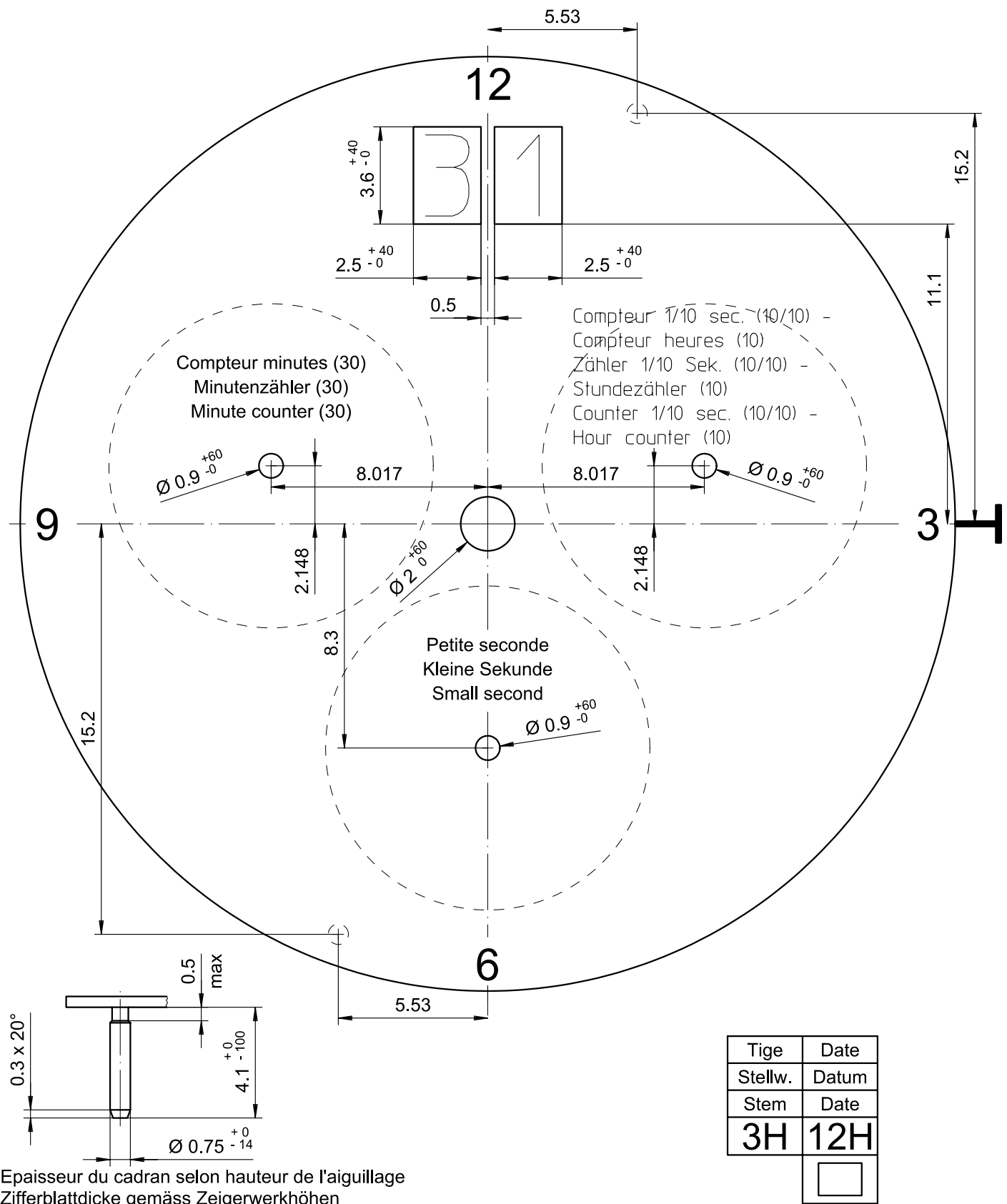
Standard battery	No. 395
Standard battery life	48 months
Battery voltage	1.5 V
Current consumption – typical	1.48 μ A (Date Mechanism not in Gear)
Current consumption – maximum	2 μ A (Date Mechanism not in Gear)





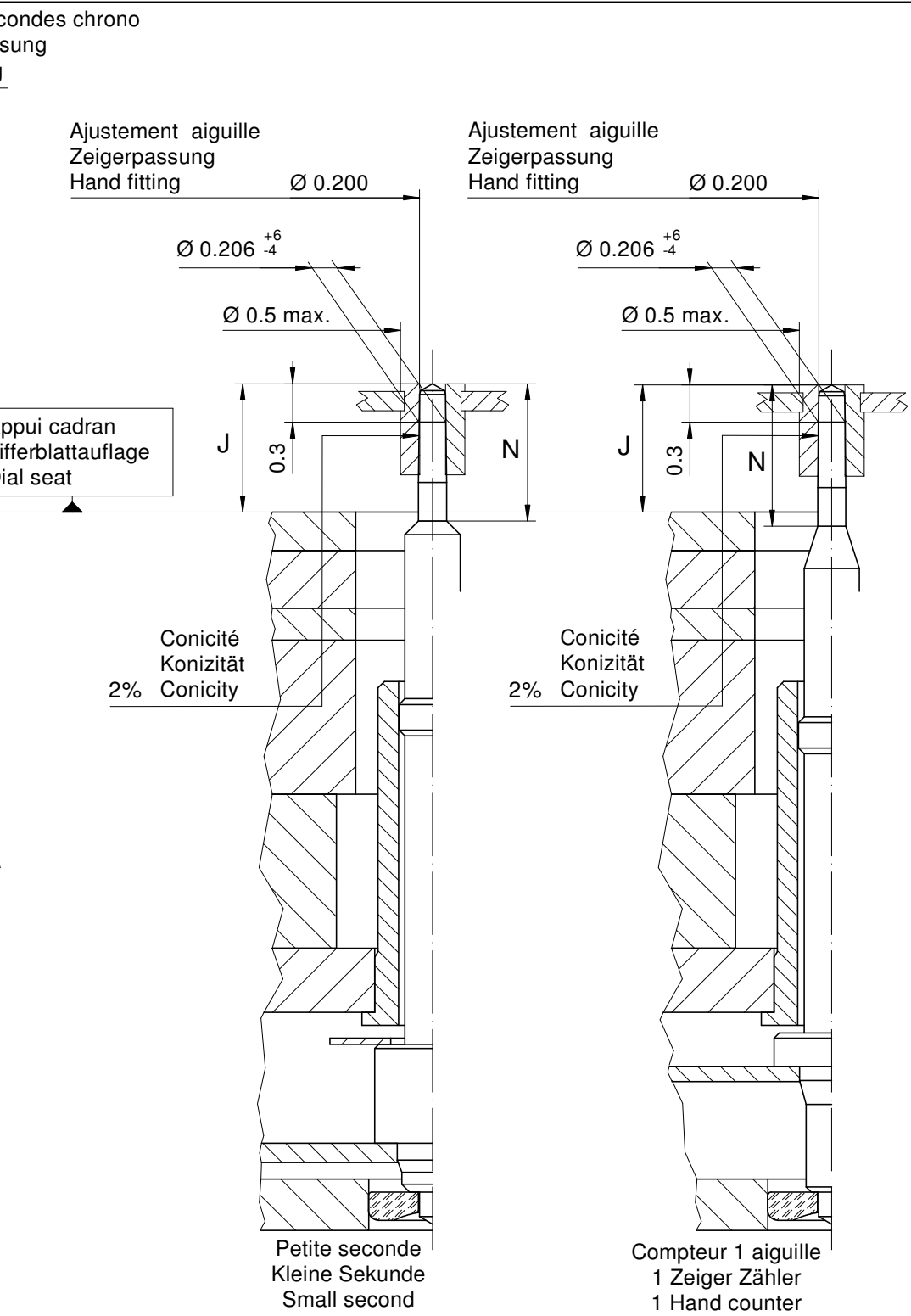
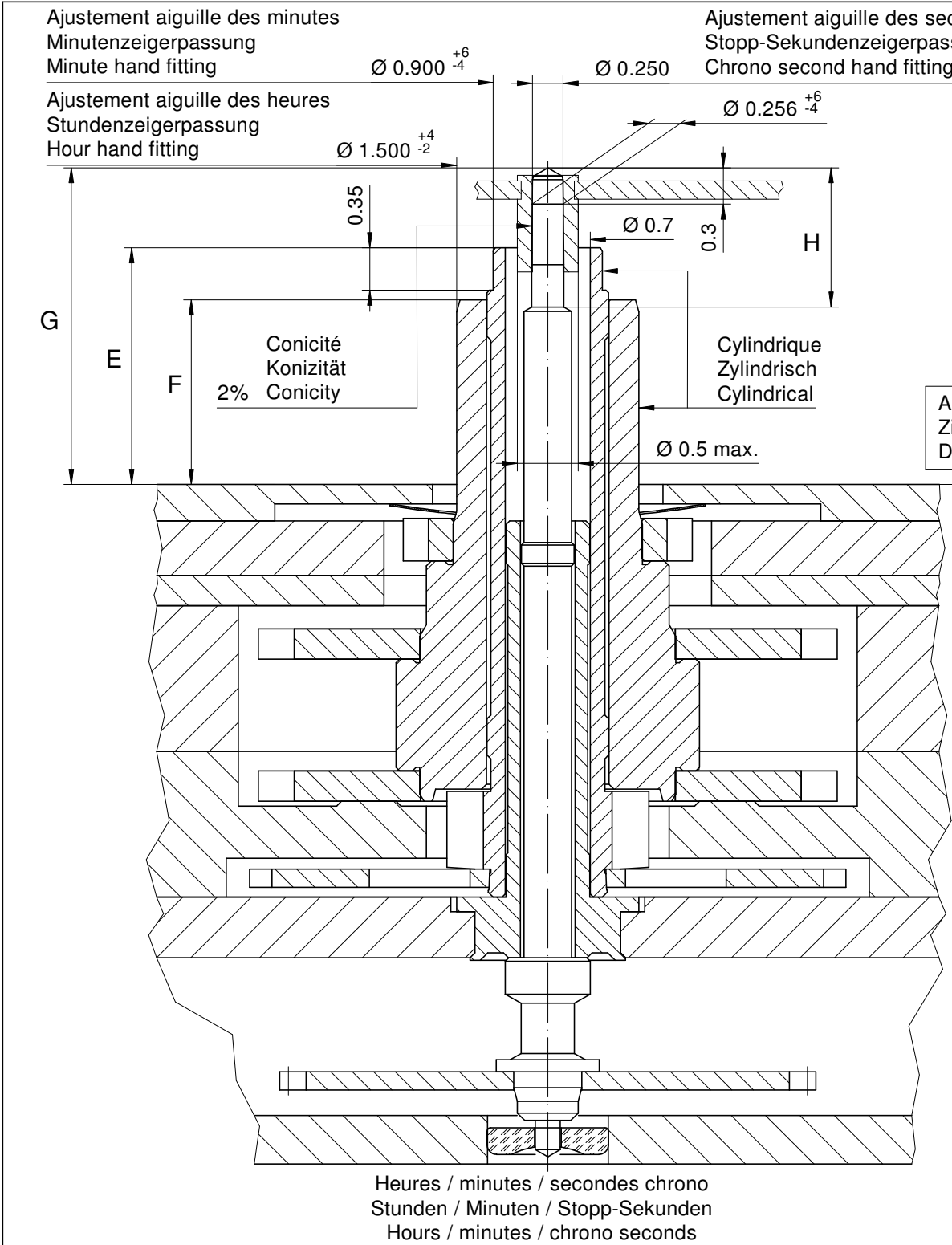
Epaisseur du cadran selon hauteur de l'aiguillage
Zifferblattdicke gemäss Zeigerwerkhöhen
Dial thickness according to hand fitting heights

<div>Cadran</div> <div>Zifferblatt</div> <div>Dial</div> <div>15"</div>		Issued	06.12.2010	dh
		Modified	06.12.20100 ÄÄ 10074	dh
		Released	YES	
		Tolerance	+/- 20 µm	
		Scale	5 : 1 (A4V)	
RONDA	8040.B	Sous réserve de modifications Änderungen vorbehalten Modifications reserved		
		No.	5010.014	00



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

Cadran Zifferblatt Dial		15'''		Issued	16 Mai 2008	mg
				Modified	12 Feb 2010 ÄA 5198	fl
				Released	YES	
				Tolerance	+/- 20 µm	
				Scale	5 : 1 (A4V)	
RONDA	8040.B	Sous réserve de modifications Änderungen vorbehalten Modifications reserved				
		No.	5010.805	00		



Aiguillages Zeigerwerkhöhe Hand fitting height							
Dépassement Höhe über Zifferblattauflage Height over dial seat							
No	Pignon des secondes chrono Stopp-Sekundentrieb Chrono second pinion	Chaussée Minutenrohr Cannon-pinion	Roue des heures Stundenrad Hour wheel		Petite seconde Kleine Sekunde Small second	Pignon compteur Zählertrieb Counter pinion	1 aig. 1 Zeiger 1 Hand
1	G	E	F	H	N	J	J
-	2.61	1.95	1.52	1.15	1.05	1.00	1.00

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	2.10	1.55	1.10	0.55	0.55	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 minute Zähler Zeiger Minute Counter hand minute	Aiguille compteur 1/10 sec. Zähler Zeiger 1/10 Sek. Counter hand 1/10 sec.	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	10	Masse / Masse / weight
µNm	max.	0.06	0.80	0.80	0.07	0.03	0.02	Balourd / Unwucht / unbalance
gmm ²	max.	1.0	---	---	0.4	1.0	1.0	Inertie / Massenträgheit / Inertia
N	max.	30	40	40	30	30	30	Force de chassage / Aufpresskraft / Force

Aiguillages Zeigerwerkhöhen 15 ''' Hand fitting heights		Issued	02 Jun 2008	mg
		Modified	15 Okt 2014 ÄÄ 13275	dh
		Released	Yes	
		Tolerance	µm	
		Scale	20 : 1 (A3H)	
RONDA 8040.B		Sous réserve de modifications Änderungen vorbehalten Modifications reserved		
		No.	3316.123	02



Tige de travail (intégrée dans le mouvement)
Arbeitsstellwelle (im Werk eingebaut)
Working stem (implemented in the movement)

No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.203.CO	21.30	11.67	28.57	11.12	0.90	1.10



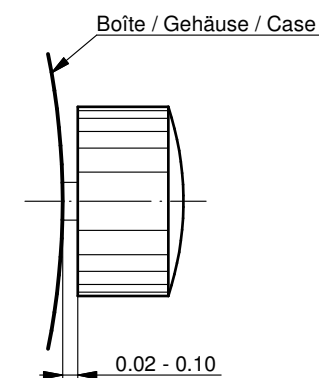
Couleur de la couronne Kronenfarbe Crown color	gris foncé dunkelgrau dark grey
Code	UN 7005

Tige (normale) / Stellwelle (normal) / Stem (normal)

No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.203	21.30	11.67	28.57	11.12	0.90	1.10



Couronne normale
Normale Krone
Normal crown

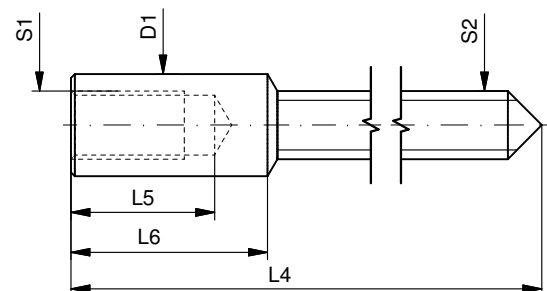


Couronne vissée
Geschraubte Krone
Screwed crown

Force ⇐ min. Kraft ⇐ min. Force ⇐ min.	10 N
Force ⇐ max. Kraft ⇐ max. Force ⇐ max.	15 N

Rallonge de tige / Stellwelle Verlängerung / Stem extension

No. d'article Artikelnummer Part number	L4	L5 (min)	L6	S1	S2	D1
3000.040	12.00	1.90	2.60	0.90	0.90	1.35



Tige (dimensions / forces)
Stellwelle (Dimensionen / Kräfte)
Stem (dimensions / forces)

RONDA

8040.B, 8040.N

Issued	07 Sep 2012	ds5222
Modified	25 Apr 2017 ÄA 34582	mg5224
Released	YES	
Tolerance	---	
Scale	10:1 (A3)	
Sous réserve de modifications Äenderungen vorbehalten Modifications reserved		
No.	5030.023	01



Movement holder
Removing setting stem
H8XXX.1T



Movement holder
Setting hands
H8XXX.1A

Fitting dial and hands

- Crown in position II
- Wind crown, until date 02 appears
- Crown in position III
- Wind hour hand forwards, until date changes to 03
- Remove working hand
- Fit dial
- Point all hands towards 12 o'clock
- Set time
- Zero chrono hand*
- Crown in position II
- Set date
- Crown in position I

Date switching duration

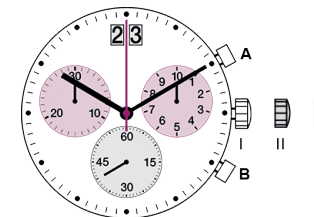
First and tenth digit discs

~2hrs

*Zeroing chronograph hand

- Activate 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 hour hand
- Pusher A → to correct hand position
- Pusher B → Jo jump to minute hand
- Pusher A → to correct minute hand

Details: See Instruction Manual



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.

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.

Description of the display and control buttons

Display elements	8040.N	Display elements	8040.B
Minute hand		Minute hand	
1/2 second counter (running for the first 30 sec.)		1/2 second counter (running for the first 30 sec.)	
Hour counter after 30 min.		Hour counter after 30 min.	
Day of the week hand		Date	
Hour hand		Hour hand	
Minute counter		Minute counter	
Second counter		Second counter	
Second hand		Second hand	
Date			
Control buttons		Control buttons	
Push-button A & B		Push-button A & B	
Crown		Crown	

01

Setting the time

- 1 Pull out the crown to position III (the watch stops).
- 2 Turn the crown until you reach the correct time 8:45.
- 3 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

Setting the date (quick mode)

- 1 Pull out the crown to position II (the watch continues to run).
- 2 Turn the crown anticlockwise until the correct date 01 appears.
- 3 Push the crown back into position I.

Please note:
During the date changing phase between approx. 8 PM and midnight; the date must be set to the date of the following day.

An extreme acceleration in setting the date with quick mode can induce a false date indication. The synchronization is re-established by setting the date from 01 till 31 (crown in position II).

03

Setting the date, day of the week (8040.N), time

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

- 1 Pull out the crown to position III (the watch stops).
- 2 Turn the crown until yesterday's day of the week FRI appears.
- 3 Push the crown to position II.
- 4 Turn the crown anticlockwise until yesterday's date appears 22.
- 5 Pull out the crown to position III (the watch stops).
- 6 Turn the crown until the correct date 23 and day of the week SAT appears.
- 7 Continue to turn the crown until the correct time 8:35 PM appears.
- 8 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

Chronograph: Basic function

(Start / Stop / Reset)

Example:

- 1 Start: Press push-button A.
- 2 Stop: to stop the timing, press push-button A once more and read the chronograph counters:
4 min / 38 sec / 1/2 sec
- 3 Zero positioning:
Press push-button B.
(The chronograph hands will be reset to their zero positions.)

05

Chronograph: Accumulated timing

Example:

- 1 Start: (start timing)
- 2 Stop: (e.g. 15 min 5 sec following 1)
- 3 Restart: (timing is resumed)
- 4 Stop: (e.g. 5 min 12 sec following 3)
= 20 min 17 sec
(The accumulated measured time is shown)
- 5 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

Chronograph: Intermediate or interval timing

Example:

- 1 Start: (start timing)
- 2 Display interval: e.g. 20 minutes 17 seconds (timing continues in the background)
- 3 Making up the measured time: (the chronograph hands are quickly advanced to the ongoing measured time.)
- 4 Stop: (Final time is displayed)
- 5 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

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).

- 1 Pull out the crown to position III (all chronograph hands are in their correct or incorrect zero position.)
- 2 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

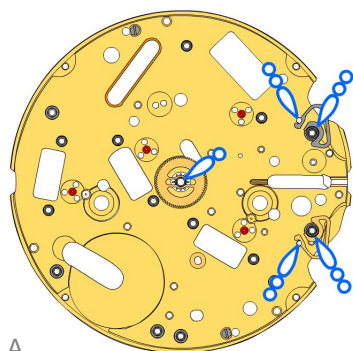
Adjusting the 1/2 second counter hand (position 3h)
Single step A 1 x short
Continuous A long

Adjusting the next hand B

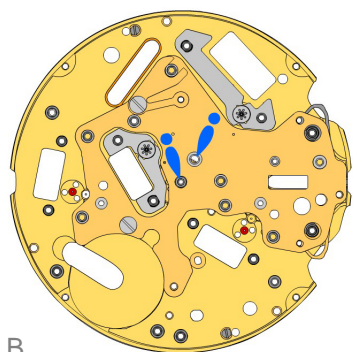
Adjusting the minute counter hand (position 5h)
Single step A 1 x short
Continuous A long

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

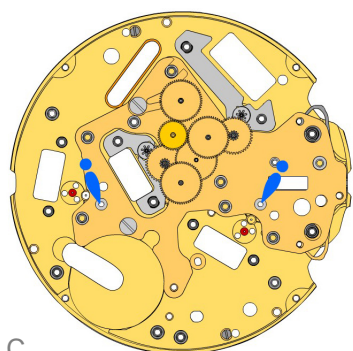
08






A


















B

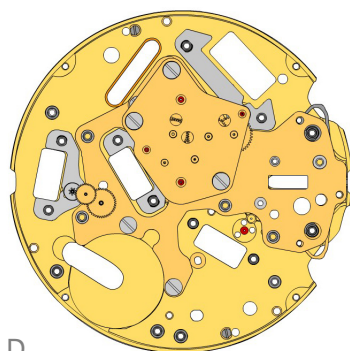


C

2000.700.G 1.		Main plate
3406.038 2.		Pusher jumper A Put the yellow jumper between the two posts on the closer side.
3406.030 3.		Pusher jumper B Put the grey jumper between the two posts on the further side.
3305.364.CO 4.		Canon pinion (Aig.1)

2030.029 5.		Center bridge Center bride held by 2 screws 4000.250.
4000.250 6.		Screw
3406.040 7.		Friction spring Friction spring held by 1 screw 4000.250.
4000.250 8.		Screw
3622.055 9.		Stator
3622.054 10.		Stator chrono Mark 1 on stator.
3715.119.RK 11.		Rotor
3715.119.RK 12.		Rotor

3147.073.CO 13.		Intermediate wheel
3147.074.CO 14.		Intermediate wheel chrono
3122.067.CO 15.		Third wheel
3136.180.CO 16.		Chronograph wheel
3136.179.CO 17.		Second wheel
3136.178.CO 18.		Small second wheel
3004.203.CO 19.		Reverse wheel



D

2020.188.G
20.



Train wheel bridge
Train wheel bridge held by 2 screws 4000.250.

4000.250
21.



Screw

3622.039
22.



Stator

3402.012.CO
23.



Minute counting wheel (30min)

3715.120.RK
24.

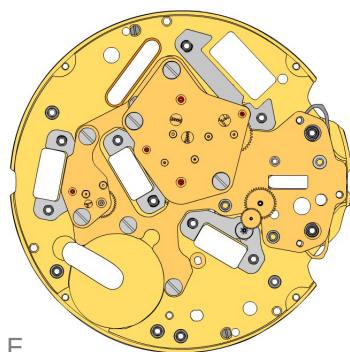


Rotor

3147.076.CO
25.



Intermediate wheel (counter 30min)



E

2020.191.G
26.



Counter train wheel bridge (9h30)
Train wheel bridge held by 2 screws 40000.250. Mark [2].

4000.250
27.



Screw

3622.039
28.



Stator

3402.013.CO
29.



Counting wheel (1/10 s)

3715.120.RK
30.



Rotor

3147.075.CO
31.



Intermediate wheel (counter 1/10 s)

2020.190.G
32.

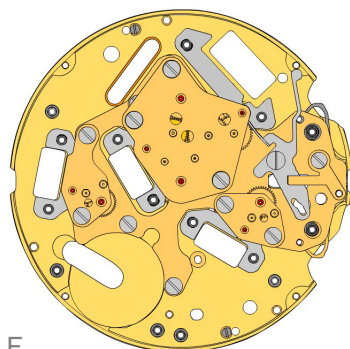


Counter train wheel bridge (2h30)
Train wheel bridge held by 2 screws 40000.250. Mark [2].

4000.250
33.



Screw



F

3016.029
34.



Stop lever
Stop lever held by 1 screw 4000.249.

4000.249
35.



Screw

2130.222
36.

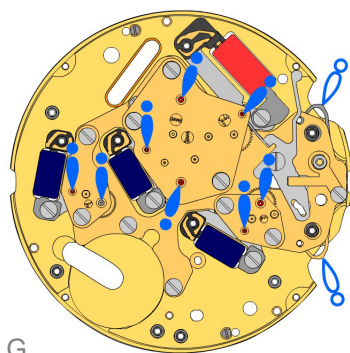


Maintaining plate
Maintaining plate held by 1 screw 4000.248






4000.248
37.

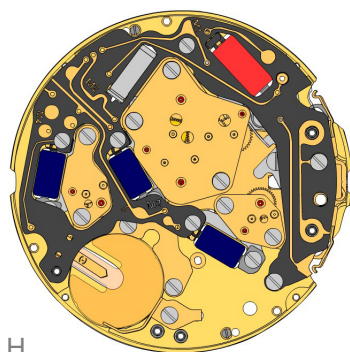


Screw










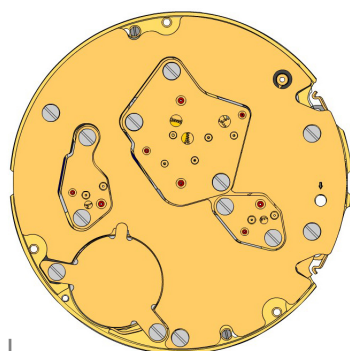
G

3621.072.RK 38.		Coil Attention: Please don't hold the coil on the black side. Else the wire support can break.
3621.055.RK 39.		Coil counter Attention: Please don't hold the coils on the black side. Else the wire support can break.
3621.055.RK 40.		Coil counter Attention: Please don't hold the coils on the black side. Else the wire support can break.
3621.055.RK 41.		Coil counter Attention: Please don't hold the coils on the black side. Else the wire support can break.
4000.250 42.		Screw









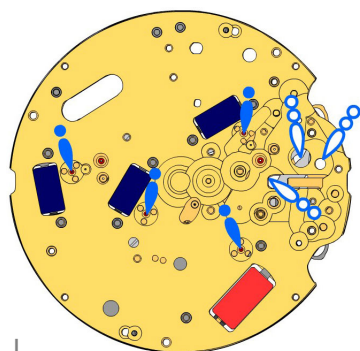
H

3603.089 43.		Battery insulator
3601.134 44.		Pusher contact spring
3612.218 45.		Electronic module Electronic module held by 6 screws.
4000.248 46.		Screw 4 screws 4000.248 for pressing the module on the coils.
4000.250 47.		Screw 2 screws 4000.248 for pressing the module on the 2 posts.
3601.132.G 48.		Lateral bridle Lateral bridle held by 1 screw 4000.250.
4000.250 49.		Screw

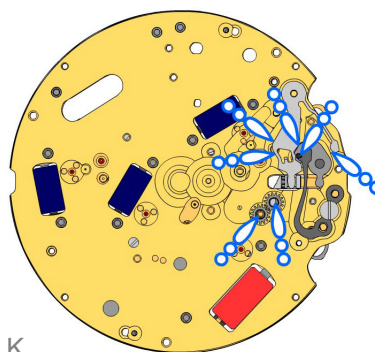


I

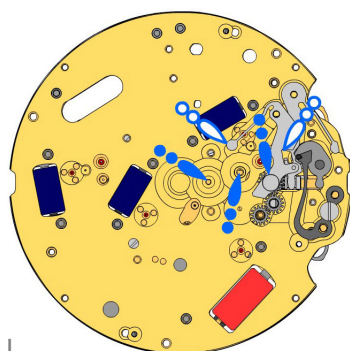
3603.090 50.		Circuit insulator
2130.206.G.M01.8040B 51.		Electronic module cover Electronic module cover held by 4 screws 4000.250
4000.250 52.		Screw
3600.010.HGF 53.		Battery 395
3601.133.G 54.		Bridle + Bridle + held by 2 screws 4000.250.
4000.250 55.		Screw



J



K



L

2000.700.G
56.



Main plate

3017.054.CO
57.



Setting lever

3001.046
58.



Sliding pinion

3015.088
59.



Yoke

3905.063
60.



Setting lever jumper
Lever held by 1 screw 4000.282

4000.282
61.



Screw

3004.200
62.



Corrector setting wheel

3004.200
63.

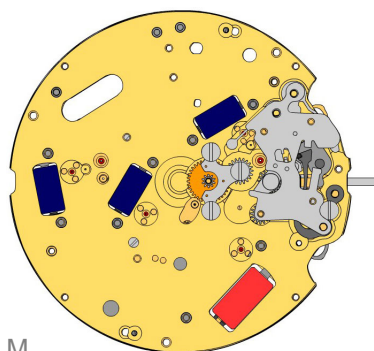


Corrector setting wheel

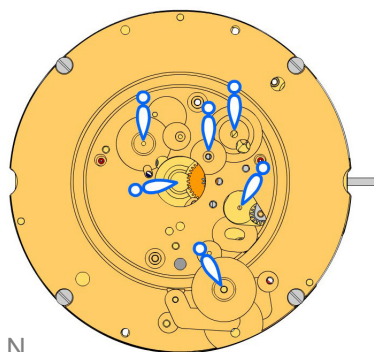
3015.087.CO
64.



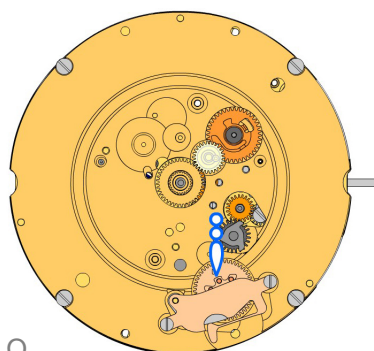
Setting wheel yoke





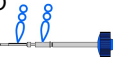














M

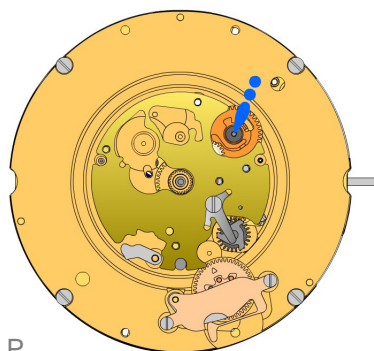


N

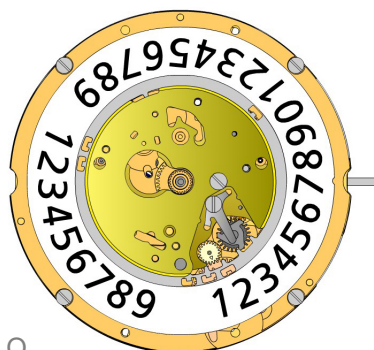


O

2130.208 65.		Setting mechanism cover Setting mechanism cover held by 4 screws 4000.305.
4000.305 66.		Screw
3004.203.CO 67.		Setting stem Attention on the right position of the sliding pinion.
3004.222 68.		Intermediate setting wheel
3007.079.CO 69.		Minute wheel
2130.209 70.		Minute train bridge Minute train bridge held by 3 screws 4000.278.
4000.278 71.		Screw
2000.671.G 72.		Main plate retro Minute train bridge held by 4 screws 4000.248.
4000.248 73.		Screw
3004.220 74.		Tens indicator driving wheel The short tooth of the tens indicator driving wheel must point to the center of the movement.
3500.072 75.		Tens jumper
2130.187 76.		Tens jumper maintaining plate Tens jumper maintaining plate held by 2 screws 4000.279. Tensioning the spring arm.
4000.279 77.		Screw
3301.292.CO 78.		Hour wheel
3004.208.CO 79.		Date indicator driving wheel
3147.061 80.		Intermediate date wheel
3147.066.CO 81.		Date corrector setting wheel







P














Q







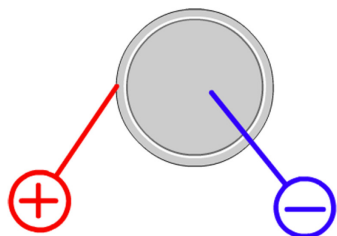
R

2130.188 82.		Date indicator plate
3905.068 83.		Date corrector spring Date corrector spring held by 1 screw 4000.244.
4000.244 84.		Screw
3500.068 85.		Date jumper

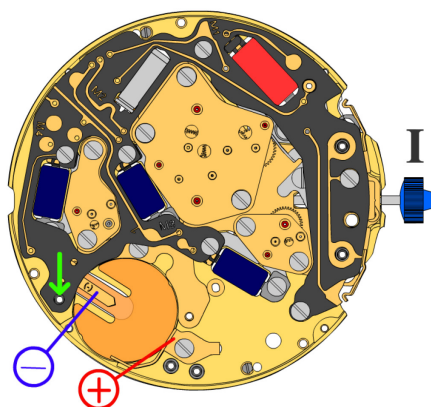
3504.229.AF.1.A 86.		Units indicator (standard) Nick of the indicator at 3 o'clock.
2130.189 87.		Date indicator maintaining plate Date indicator maintaining plate held by 1 screw.
4000.250 88.		Screw
3905.064 89.		Date jumper spring Insert the date jumper spring in the previous opening.
3147.062 90.		Tens intermediate wheel Arrow positioning radially outwards.

3504.230.AF.1.A 91.		Tens indicator (standard) Nick of the indicator at 3 o'clock.
3315.003 92.		Friction spring
2130.190.G 93.		Date mechanism maintaining plate Date mechanism maintaining plate held by 3 screws 4000.320.
4000.320 94.		Screw
3506.077.G 95.		Intermediate Dial support Polished version first.
3506.076.G 96.		Dial support

8200 97.		Moebius 8200
9014 98.		Moebius 9014
124 99.		Jismaa 124
9020 100.		Moebius 9020

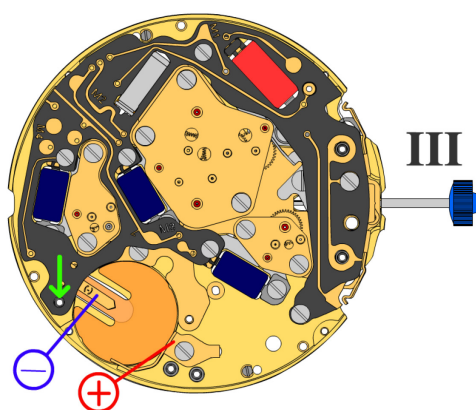


Battery	395
Voltage	1.55 V



*Setting stem in position I, calendar not in gear,
60 s measuring interval for rate and consumption:*

Typical consumption	1.48 μA
Maximal consumption	2.00 μA
Rate	-10s/M. .. +20s/M.
Lower working voltage limit	1.20 V

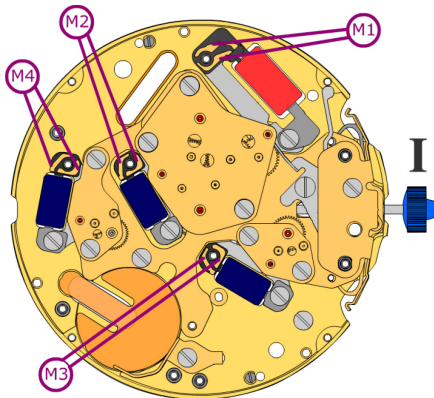


Setting stem in position III, 60 s measuring interval:

Typical consumption	0.10 μA
Maximal consumption	0.30 μA

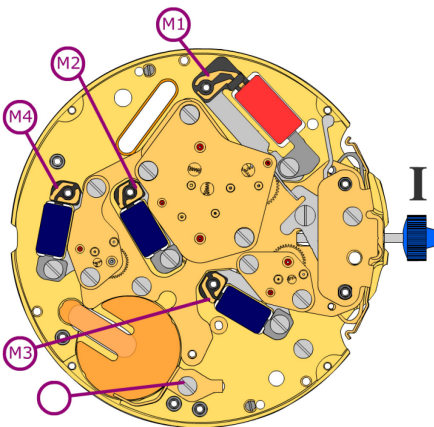
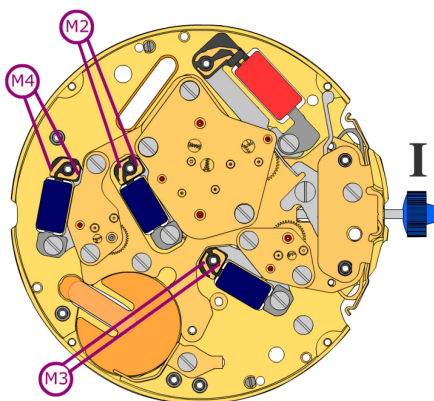


Hold down the electrical module to allow the electronic flow.


Coil resistance M1 **1.50 k Ω .. 1.70 k Ω**

Coil resistance M2 **1.68 k Ω .. 1.88 k Ω**

Coil resistance M3 **1.68 k Ω .. 1.88 k Ω**

Coil resistance M4 **1.68 k Ω .. 1.88 k Ω**

Coil isolation M1/M2/M3/M4 **∞ k Ω**

Signal generator (4.9 ms, 8 Hz):

Lower working voltage limit
M2/M3/M4 **1.20 V**