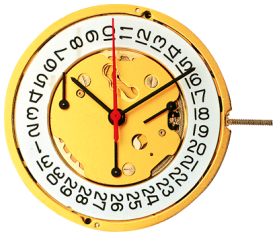
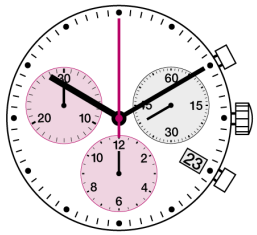
# RONDA startech 5000

## Chronographs, Big Date & Date, different calendar systems, Alarm

## *Caliber 5030.D – 12½'''*






### Product Specifications

| | | |
|---|---|---|
| Analog quartz movement | | |
| Line | | startech |
| Caliber | | 5030.D |
| Size | | 12½''' |
| Version | Swiss Made | 13 Jewels / gold plated |
| | Swiss Parts | 6 Jewels / nickel plated |
| Standard battery life | | 54 months |
| Hand fitting height | | 1 |

### Features

- Repairable metal watch movement
- Very long battery life
- Power saving mechanism with pullled out stem: Reduction of consumption approximately 70%
- Very easy handling by two pushers

## Functions

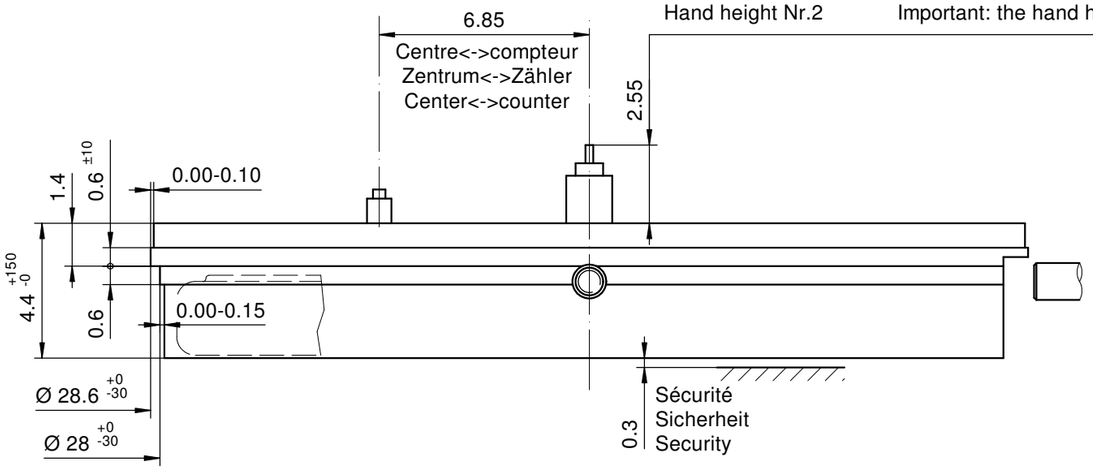
- 3 eyes
- Chronograph
- Center stop second (1/1 sec)
- 30 minute counter
- 12 hour counter
- ADD and SPLIT functions
- Date
- Small second

## Technical Specifications

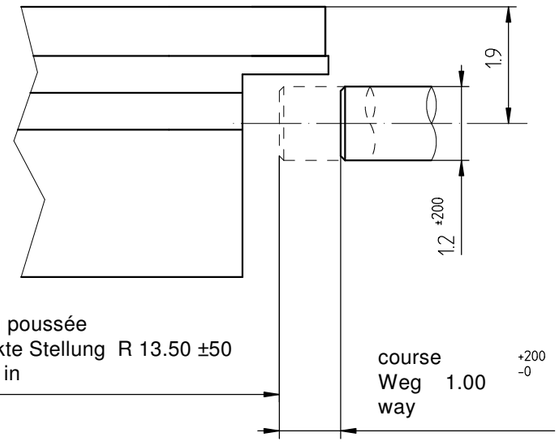
| | |
|---|---|
| Diameter Total | 28.60 mm |
| Case fitting | 28.00 mm |
| Movement height | 4.40 mm |
| Height over standard battery | 4.40 mm |
| Movement rest | 0.60 mm |
| Height over stem | 1.90 mm |
| Length of stem travel | 0.90 mm |
| Force to push the stem for screwed crown | 10 / 15 N |
| Stem thread | 0.90 mm |
| Standard battery | 395 |
| Standard battery life | 54 months |
| Battery voltage | 1.5 V |
| Current consumption – typical | 1.32 µA (Date Mechanism not in Gear) |
| Current consumption – maximum | 1.65 µA (Date Mechanism not in Gear) |
| Useful torque second – typical | 6 µNm |
| Useful torque minute – typical | 300 µNm |
| Useful torque center stop second – typical | 7 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 |

Aiguillage No.2
Zeigerwerkhöhe Nr.2
Hand height Nr.2

Important: l'aiguillage peut varier selon le modèle
Wichtig: die Zeigerwerkhöhe kann bei verschiedenen Modellen unterschiedlich sein
Important: the hand height can vary between different models



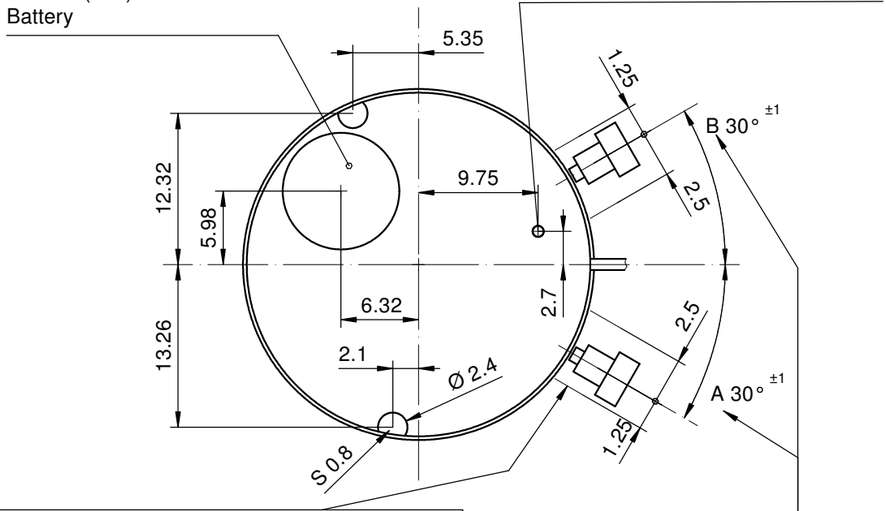

Poussoirs
Drücker
Pushers




Côté fond de boîte
Seite Gehäuseboden
Case back side

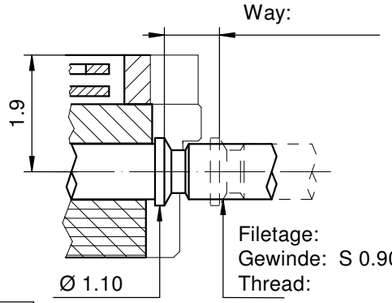
Pile
Batterie (395) Ø 9.50 x 2.60mm
Battery

Position pour extraire la tige
Position zum Entfernen der Stellwelle
Position to remove the stem

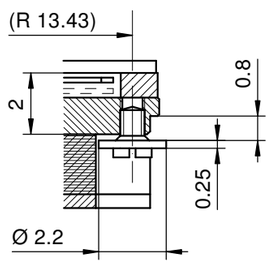



Stellwelle
Tige
Stem

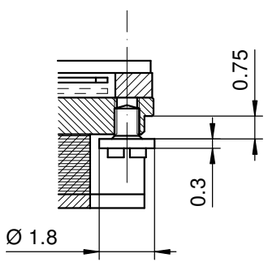
Chemin:
Weg: 0.90
Way:



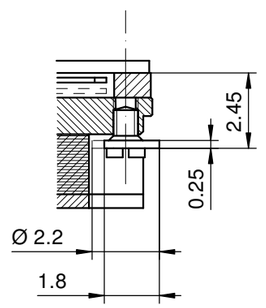

Vis
Schraube Nr. 4000.310
Screw




Vis
Schraube Nr. 4000.195
Screw




Vis
Schraube Nr. 4000.194
Screw




Sécurité entre l'aiguille des secondes et le verre:
Sicherheit zwischen Sekundenzeiger und Glas: 0.30mm
Security between second hand and glass:

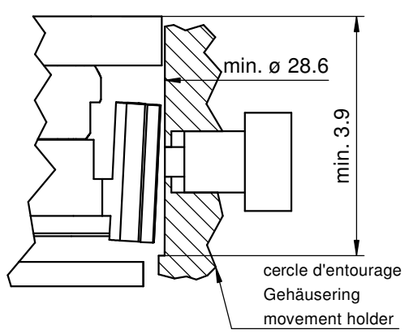
Le cadran doit être tenu par la boîte
Das Zifferblatt muss durch die Schale gehalten werden
The dial must be hold by the case

La course du poussoir doit être limitée dans le poussoir lui-même. Sa position poussée doit être controlée.

Die Weglänge des Drückers ist im Drücker selbst zu begrenzen. In der gedrückten Stellung ist seine Position zu kontrollieren

The way of the pusher has to be limited in the pusher itself. Its position must be checked while pushed in.

Dégagement cercle d'entourage pour poussoir
Freistellung Gehäusering für Drücker
Opening movement holder for pusher




L'angle indiqué pour la direction du poussoir et la position doivent être respectés.
Pour un angle de 0° des poussiors A et B, voir plan 5000.345

Der angegebene Winkel für die Drückerrichtung und die Position müssen eingehalten werden.
Für einen Drückerwinkel von 0° bei A und B, siehe Zeichnung 5000.345

The indicated angle of the pusher direction and the position must be fullfilled. For pusher angles of 0° (pusher A and B), see drawing 5000.345.

# Cage
# Uhrwerkgestell 12½'''
# Frame

| | | |
|---|---|---|
| Issued | 08 Jan 2001 | mg |
| Modified | 31 Aug 2016<br>ÄA 34777 | dh |
| Released | YES | |
| Tolerance | +/- 20 µm | |
| Scale | 10 : 1 (5 : 1) (A3H) | |

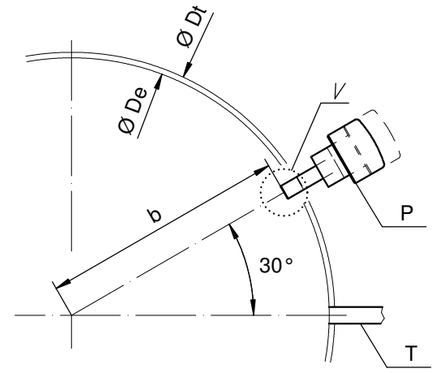
RONDA

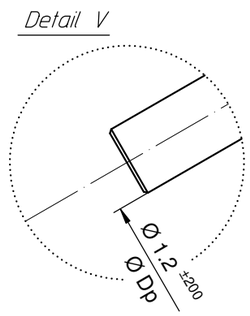
5040.B, 5040.D, 5030.D, 5021.D, 5040.E

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

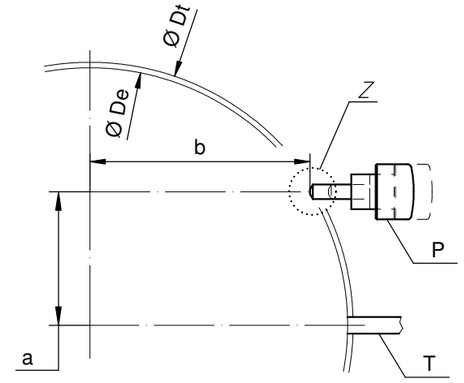
No. 5000.315 10

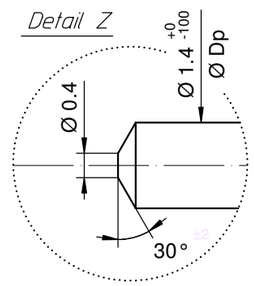
| Angle<br>Winkel<br>Angle 30° | |
|---|---|
| Ø Dp | b |
| 1.00 | 13.50 |
| 1.10 | 13.50 |
| 1.20 | 13.50 |
| 1.30 | 13.50 |
| 1.40 | 13.50 |



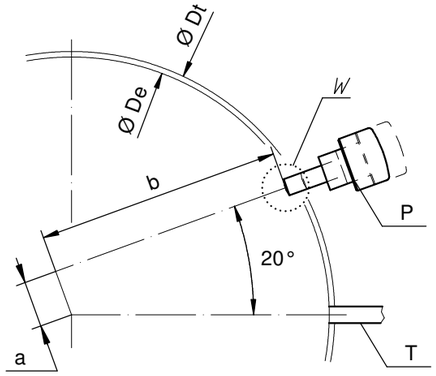



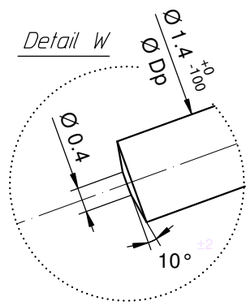

| Angle<br>Winkel<br>Angle 0° | | |
|---|---|---|
| Ø Dp | a | b |
| 1.30 | 7.40 | 11.43 |
| 1.40 | 7.45 | 11.40 |



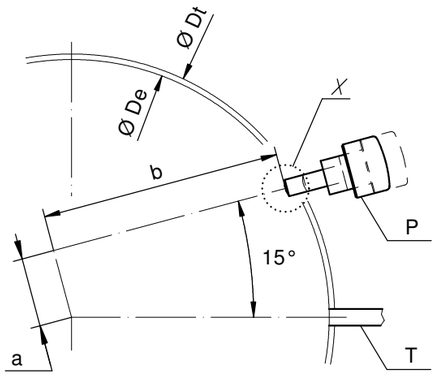



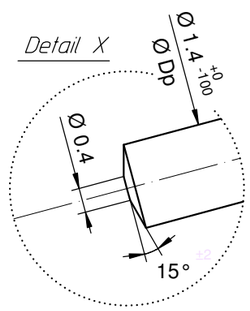

| Angle<br>Winkel<br>Angle 20° | | |
|---|---|---|
| Ø Dp | a | b |
| 1.30 | 2.57 | 13.22 |
| 1.40 | 2.59 | 13.21 |



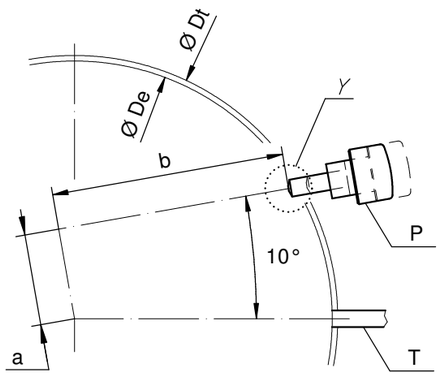



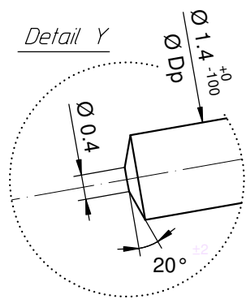

| Angle<br>Winkel<br>Angle 15° | | |
|---|---|---|
| Ø Dp | a | b |
| 1.30 | 3.83 | 12.92 |
| 1.40 | 3.86 | 12.91 |




| Angle<br>Winkel<br>Angle 10° | | |
|---|---|---|
| Ø Dp | a | b |
| 1.30 | 5.06 | 12.52 |
| 1.40 | 5.10 | 12.50 |




Ø De: diamètre d'encageage
Durchmesser der Gehäusepassung
fitting-diameter

Ø Dp: diamètre du poussoir
Drückerdurchmesser
pusher-diameter

Ø Dt: diamètre total
Totaldurchmesser
total-diameter

P: poussoir en position poussée
Drücker in gedrückter Stellung
pusher in pressed position

T: tige de mise à l'heure
Stellwelle
stem

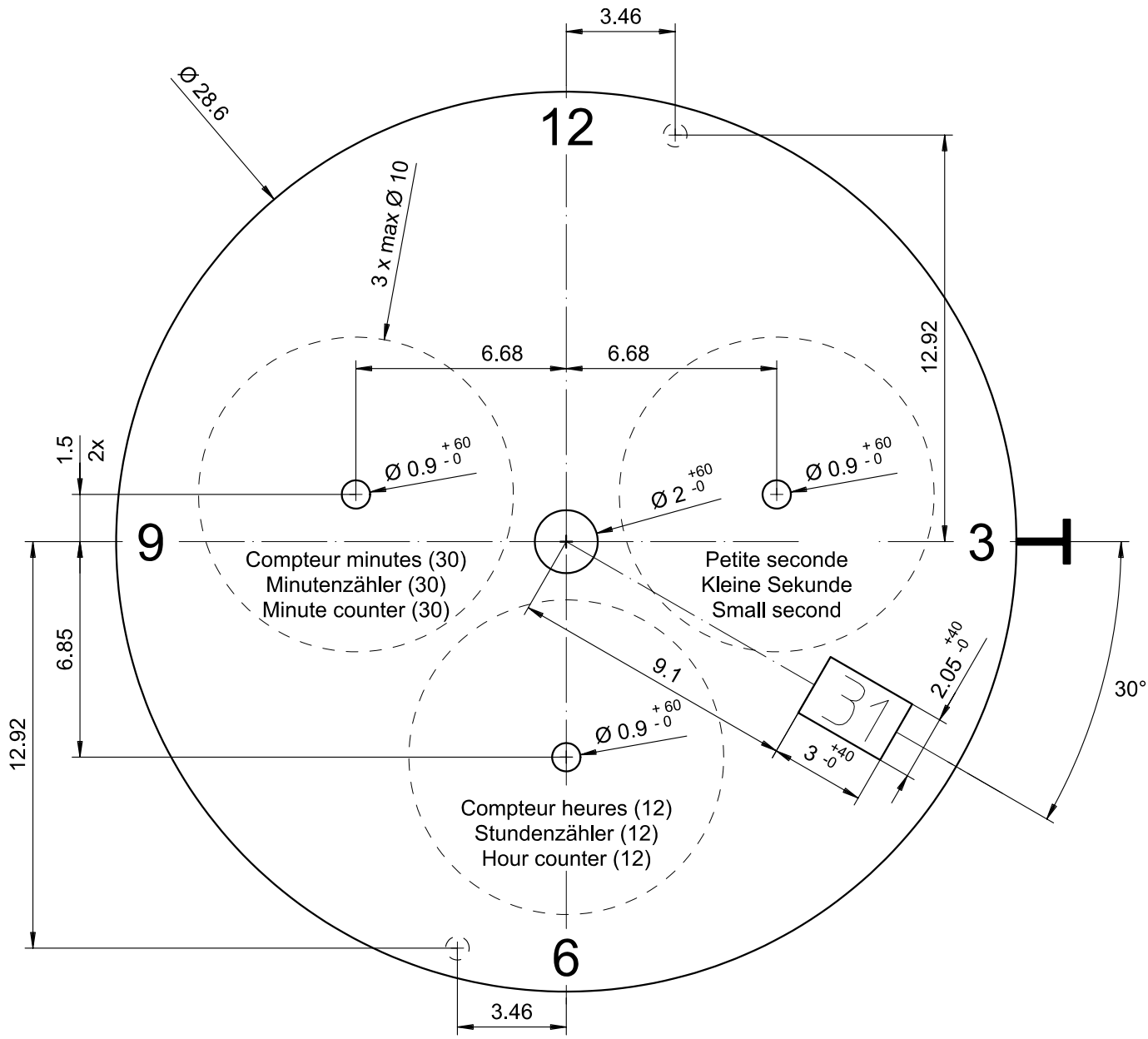
# Angle des poussoirs A et B
# Winkel der Drücker A und B
# Angle of pusher A and B

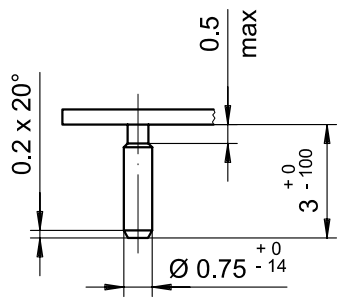
| | | |
|---|---|---|
| Issued | 06 Sep 2004 | mk |
| Modified | 30.März 2005<br>ÄA 1784 | mk |
| Released | YES | |
| Tolerance | +/- 20 µm | |
| Scale | 10 : 1 (5 : 1) (A3H) | |

RONDA | 4xxx.x, 5xxx.x

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No. 5000.345 01




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

| Tige | Date |
|---|---|
| Stellw. | Datum |
| Stem | Date |
| 3H | 4H |

# Cadran
# Zifferblatt
# Dial

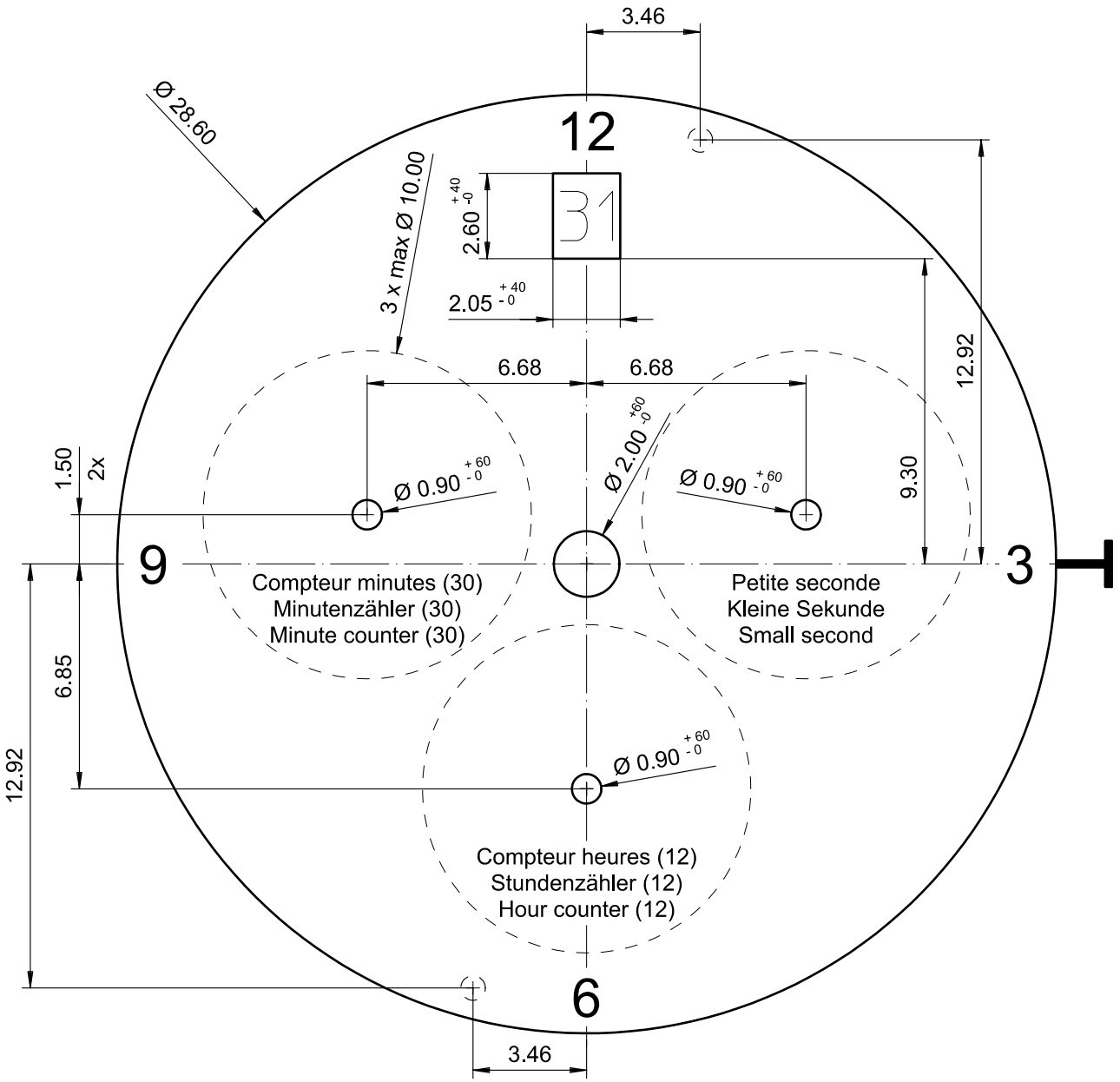
12½‴

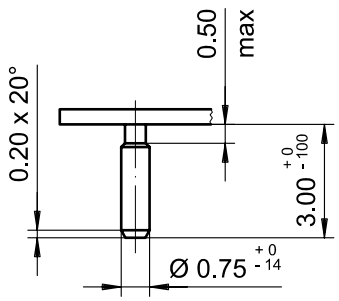
| | | |
|---|---|---|
| Issued | 13 Dez 2006 | cw |
| Modified | 15.Dez.2006<br>ÄA ---- | cm |
| Released | YES | |
| Tolerance | +/- 20 µm | |
| Scale | 5 : 1 (A4V) | |

RONDA | 5030.D

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No. 5010.652 03




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

| Tige | Date |
|---|---|
| Stellw. | Datum |
| Stem | Date |
| 3H | 12H |

# Cadran
# Zifferblatt
# Dial

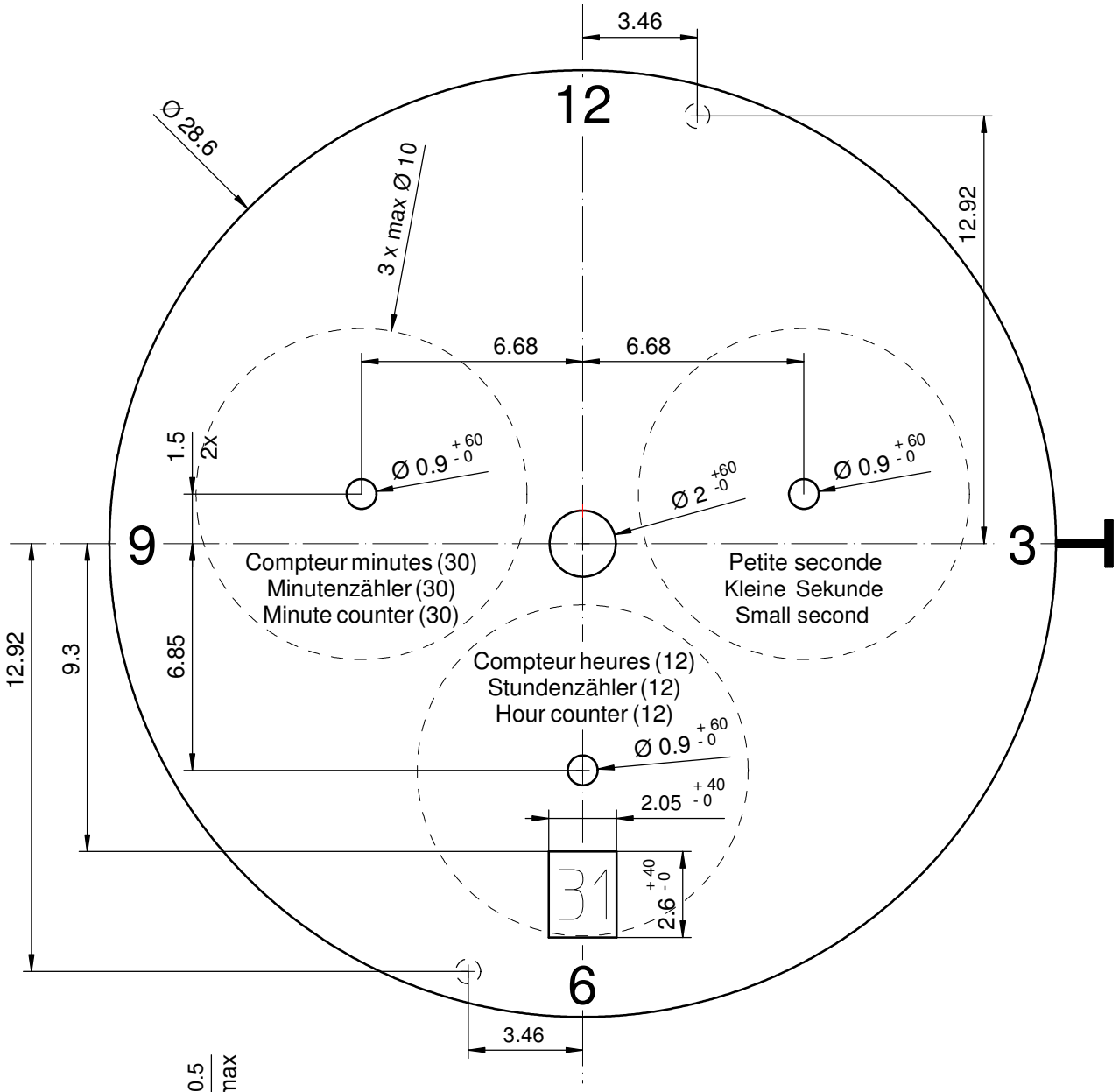
12½‴

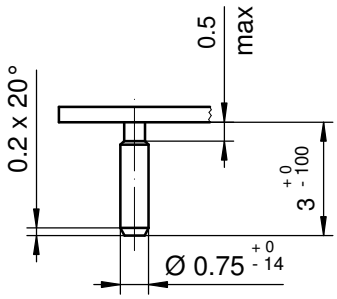
| | | |
|---|---|---|
| Issued | 13 Dez 2006 | cw |
| Modified | 15.Dez.2006<br>ÄA ---- | cw |
| Released | YES | |
| Tolerance | +/- 20 µm | |
| Scale | 5 : 1 (A4V) | |

RONDA | 5030.D

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No. 5010.658 02




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

| Tige | Date |
|---|---|
| Stellw. | Datum |
| Stem | Date |
| 3H | 6H |

# Cadran
# Zifferblatt
# Dial

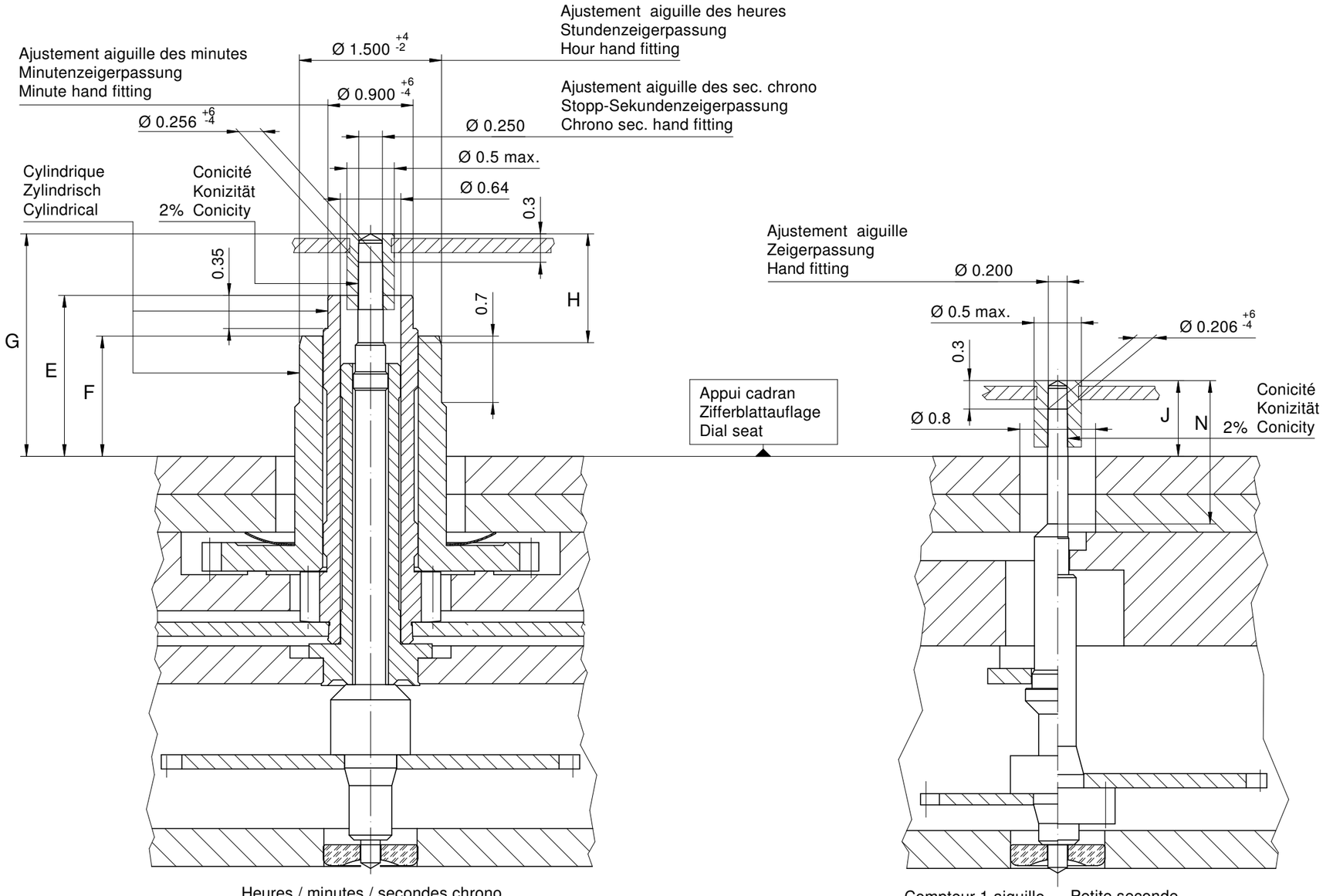
12½‴

| | | |
|---|---|---|
| Date | 20 Jun 2007 | mK |
| Checked | | |
| Tolerance | +/- 20 µm | |
| Scale | 5 : 1 (A4V) | |

RONDA | 5030.D

Sous réserve de modifications
Aenderungenvorbehalten
Modificationsreserved

No. 5010.661 00




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

Compteur 1 aiguille
1 Zeiger Zähler
1 Hand counter

Petite seconde
Kleine Sekunde
Small second

Aiguillages
Zeigerwerkhöhe
Hand fitting height

| | Dépassement Höhe über Zifferblattauflage Height over dial seat | | | | | | |
|---|---|---|---|---|---|---|---|
| | 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) |
| No | G | E | F | H | N | J | J |
| 1 | 2.35 | 1.70 | 1.27 | 1.15 | 1.50 | 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 | 1.85 | 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 | 0.80 | 0.80 | 0.07 | 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 12½'''
# Hand fitting heights

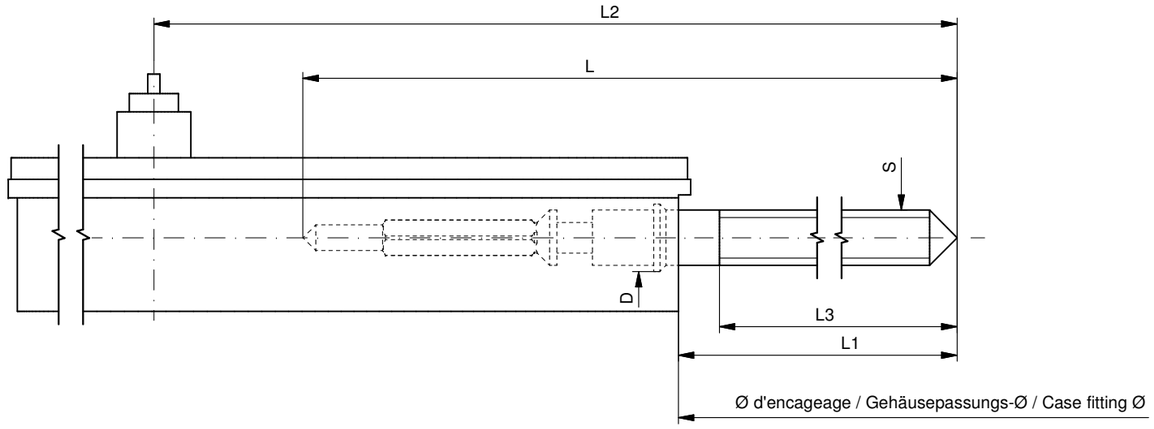
| | | | |
|---|---|---|---|
| Issued | 07 Juli 2009 | ps |
| Modified | 15 Okt 2014 ÄA 13275 | dh |
| Released | Yes | |
| Tolerance | µm | |
| Scale | 20 : 1 (A3H) | |

RONDA | 5030.D

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

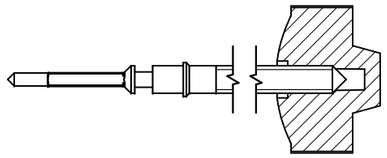
No. 3316.132 02

* 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




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

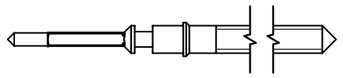
| No. d'article<br>Artikelnummer<br>Part number | L | L1 | L2 | L3 | S | D |
|---|---|---|---|---|---|---|
| 3000.177.CO | 20.00 | 10.23 | 24.23 | 10.15 | 0.90 | 1.10 |



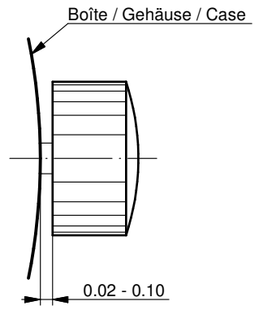
| Couleur de la couronne<br>Kronenfarbe<br>Crown color | bleu foncé<br>dunkelblau<br>dark blue |
|---|---|
| Code | UN 5002 |

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

| No. d'article<br>Artikelnummer<br>Part number | L | L1 | L2 | L3 | S | D |
|---|---|---|---|---|---|---|
| 3000.177 | 20.00 | 10.23 | 24.23 | 10.15 | 0.90 | 1.10 |
| 3000.191 | 32.00 | 22.23 | 36.23 | 22.15 | 0.90 | 1.10 |



Couronne normale
Normale Krone
Normal crown

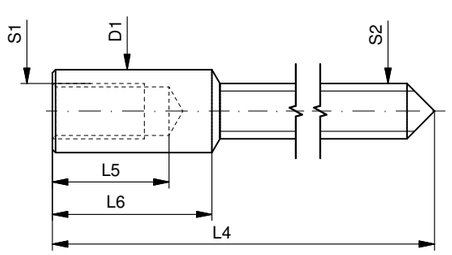



Couronne vissée
Geschraubte Krone
Screwed crown

| | |
|---|---|
| Force ⇦ min.<br>Kraft ⇦ min.<br>Force ⇦ min. | 10 N |
| Force ⇦ max.<br>Kraft ⇦ max.<br>Force ⇦ max. | 15 N |

Rallonge de tige / Stellwelle Verlängerung / Stem extension

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




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

RONDA

5010.B, 5020.B, 5021.D, 5030.D,
5040.B, 5040.D, 5040.E, 5040.F,
5050.B, 5050.C, 5051.C, 5130.B, 5130.D

| | | |
|---|---|---|
| Issued | 05 Sep 2012 | ds5222 |
| Modified | 17 Mär 2017<br>ÄA 34582 | mg5224 |
| Released | YES | |
| Tolerance | --- | |
| Scale | 10:1 (A3) | |

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

| No. | 5030.019 | 01 |
|---|---|---|

**Movement holder**
*Removing setting stem*
H5XXX.1T

**Movement holder**
*Setting hands*
H5XXX.1A

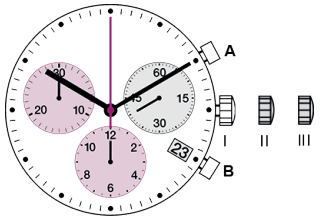
**Fitting dial and hands**

- Crown in position III
- Wind crown forwards, until date changes
- Remove working stem
- Fit dial
- Point all hands towards 12 o'clock
- Set time
- Zero chronograph hand*
- Crown in position II
- Set date
- Crown in position I

***Date switching duration:*** *~1¼hrs*

***Zeroing the Chronograph hand**

A. Activate pusher A and B for 2 seconds at the same time
   *(Chrono seconds hand rotates once)*
B. Pusher A → to correct chrono seconds hand
C. Pusher B → to jump to hour hand
D. Pusher A → to correct hand position
E. Pusher B → to jump to minute hand
F. 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.*

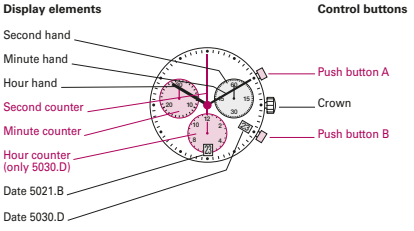
# RONDA startech – Movement Cal. 5030.D & 5021.D

## User's Manual English

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.

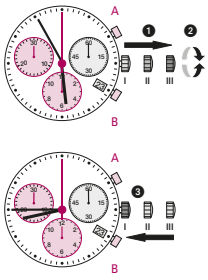
**In case of repairs, guarantee claims and questions concerning the functioning of a watch, purchasers and consumers should contact their retailer or the watch manufacturer, for which the relevant information can be found in the sales or guarantee documentation provided with the watch.**

### Description of the display and control buttons




01

### Setting the time



1* Pull out the crown to position **III** (the watch stops).

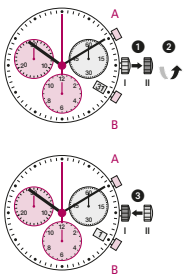
2 Turn the crown until you reach the correct time **8:45**.

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, 3 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).

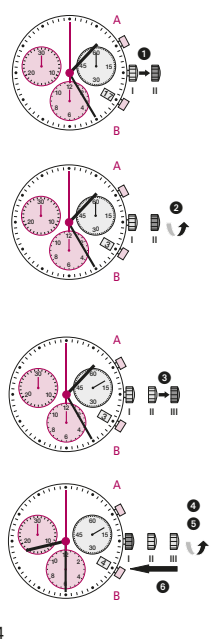
2 Turn the crown until the correct date 1 appears.

3 Push the crown back into position **I**.

**Please note:**
During the date changing phase between approx. 9 PM and 12 PM; the date must be set to the date of the following day.

03

### Setting the date/time following a battery change



Example:
– Date / time on the watch: 17 / 1:25 AM
– Present date / time: 4 / 8:30 PM

1 Pull out the crown to position **II** (the watch continues to run).

2 Turn the crown until yesterday's date appears 3.

3* Pull out the crown to position **III** (the watch stops).

4 Turn the crown until the correct date 4 appears.

5** Continue to turn the crown until the correct time 8:30 PM appears.

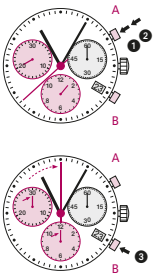
6 Push the crown back into position **I**.

**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:

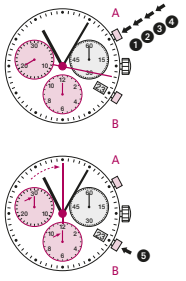
1 **Start:** Press push-button **A**.

2 **Stop:** to stop the timing, press push-button A once more and read the chronograph hands: **1h / 20min / 38 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)

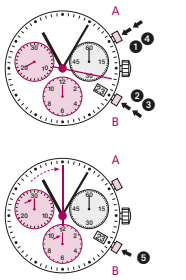
4* **Stop:** (e.g. **5**min **12** sec following 3)
**= 20 min 17 sec**
(The accumulated measured time is shown)

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.)

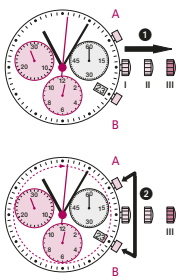
4 **Stop:** (Final time is displayed)

5 **Reset:**
The chronograph hands are returned to their zero position.

**Please note:**
* Following 3, further intervals or intermediates can be displayed by pressing **push-button B** *(display interval / make up measured time, ...).*

07

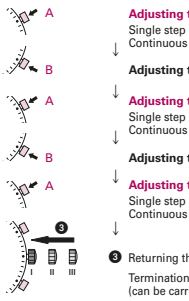
### Adjusting the chronograph hands to zero position



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 hour counter hand at 5030.D (position 6h)**
Single step A **1 x short**
Continuous A **long**

↓

**Adjusting the next hand B**

↓

**Adjusting the minute counter hand (position 9h)**
Single step A **1 x short**
Continuous A **long**

↓

3 Returning the crown to position **I**

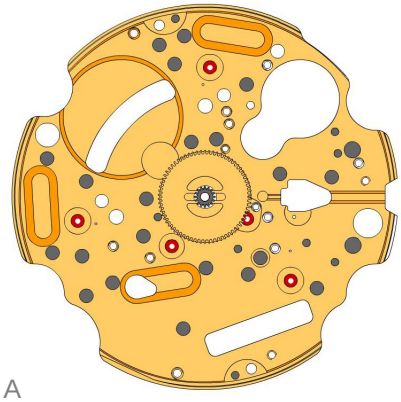
Termination of the chronograph hands adjustment (can be carried out at any time).

08

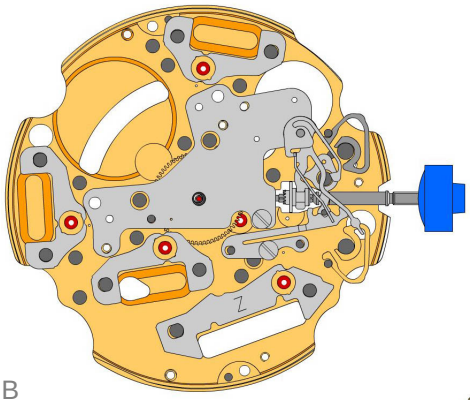
CE

06/2014

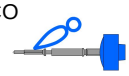
Battery type: 395 (diameter 9.5 mm x 2.6 mm / SR 927 SW)
Accuracy: +20 / -10 seconds per month

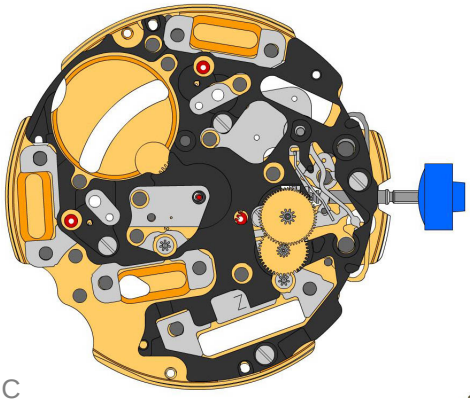


A



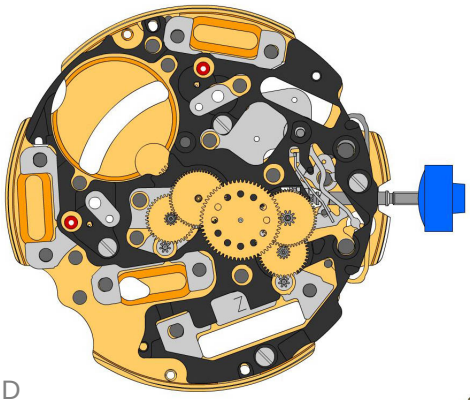
B

| | | |
|---|---|---|
| 2000.574.G<br>1. |  | Main plate |
| 3305.275.CO<br>2. |  | Cannon pinion with driver (Aig.1) |
| 2030.017.CO<br>3. |  | Centre bridge<br>Centre bridge held by 1 screw 4000.250. |
| 4000.250<br>4. |  | Screw |
| 3001.055.FI<br>5. |  | Sliding pinion |
| 3000.177.CO<br>6. |  | Setting stem |
| 3017.049<br>7. |  | Setting lever |
| 3905.049<br>8. |  | Setting lever jumper (3 positions)<br>Setting lever jumper held by 1 screw 4000.250. |
| 4000.250<br>9. |  | Screw |
| 3015.081<br>10. |  | Yoke (3 positions) |
| 3905.067<br>11. |  | Yoke spring<br>Tensioning the spring arm. |
| 3406.030<br>12. |  | Pusher jumper B<br>Put the grey jumper between the two posts on the further side. |
| 3406.038<br>13. |  | Pusher jumper A<br>Put the yellow jumper between the two posts on the closer side. |
| 3622.040<br>14. |  | Stator<br>Mark \|Z\| on stator. |
| 3622.039<br>15. |  | Stator (counter 6h, 9h and chrono) |
| 3622.039<br>16. |  | Stator (counter 6h, 9h and chrono) |
| 3622.039<br>17. |  | Stator (counter 6h, 9h and chrono) |



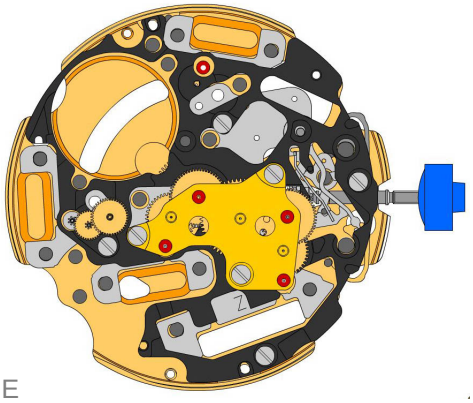
C

| | | |
|---|---|---|
| 3603.079<br>18. |  | Plastic bracket<br>Plastic bracket held by 4 screws 4000.250. |
| 4000.250<br>19. |  | Screw |
| 3715.094.RK<br>20. |  | Rotor |
| 3715.094.RK<br>21. |  | Rotor |
| 3147.046.CO<br>22. |  | Intermediate wheel |
| 3136.142.CO<br>23. |  | Second wheel (long) |



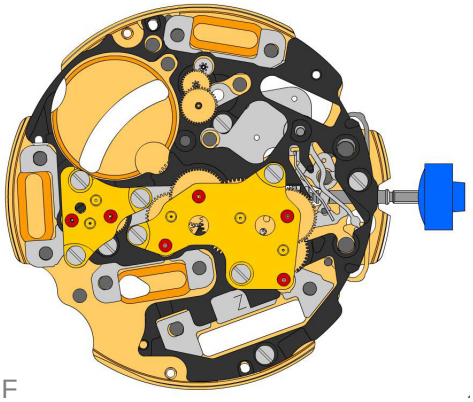
D

| | | |
|---|---|---|
| 3147.047.CO<br>24. |  | Intermediate wheel (chrono) |
| 3136.143.CO<br>25. |  | Chronograph wheel (Aig.1) |
| 3122.056.CO<br>26. |  | Third wheel |



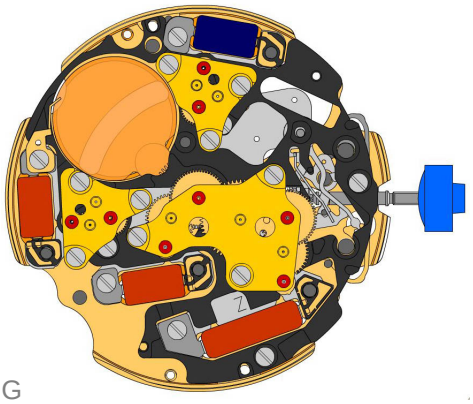
E

| | | |
|---|---|---|
| 2020.148.G<br>27. |  | Train wheel bridge<br>Train wheel bridge held by 3 screws 4000.250. |
| 4000.250<br>28. |  | Screw |
| 3715.095.RK<br>29. |  | Rotor |
| 3147.059.CO<br>30. |  | Intermediate wheel (counter) |
| 3402.006.CO<br>31. |  | Minute counting wheel |



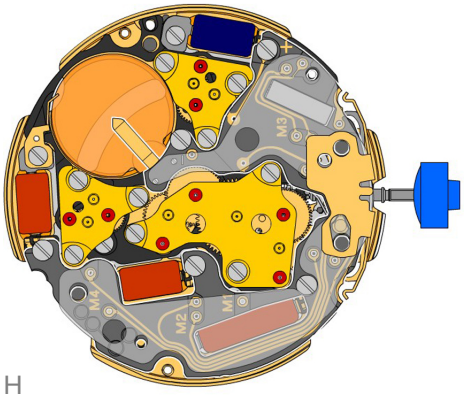
F

| | | |
|---|---|---|
| 2020.149.G<br>32. |  | Counter train wheel bridge<br>Counter train wheel bridge held by 3 screws 4000.250. |
| 4000.250<br>33. |  | Screw |
| 3715.104.RK<br>34. |  | Rotor |
| 3147.059.CO<br>35. |  | Intermediate wheel (counter 12h) |
| 3402.006.CO<br>36. |  | Minute counting wheel |



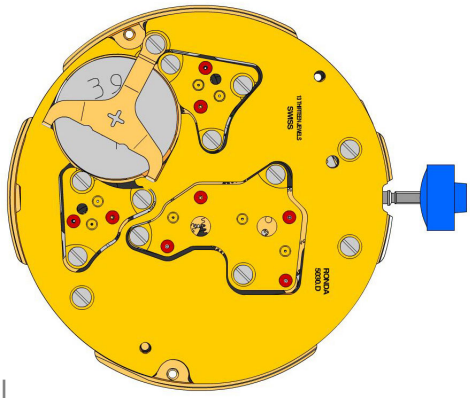
G

| | | |
|---|---|---|
| 2020.149.G<br>37. |  | Counter train wheel bridge<br>Counter train wheel bridge held by 3 screws 4000.250. |
| 4000.250<br>38. |  | Screw |
| 3621.053.RK<br>39. |  | Coil<br>Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250. |
| 3621.054.RK<br>40. |  | Coil (counter 9h, chrono)<br>Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250. |
| 3621.054.RK<br>41. |  | Coil (counter 9h, chrono)<br>Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250. |
| 3621.055.RK<br>42. |  | Coil (counter 6h)<br>Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250. |
| 4000.250<br>43. |  | Screw |
| 3601.118<br>44. |  | Contact strip<br>Contact strip held by 1 screw 4000.250. |
| 4000.250<br>45. |  | Screw |
| 3603.034<br>46. |  | Battery insulator |

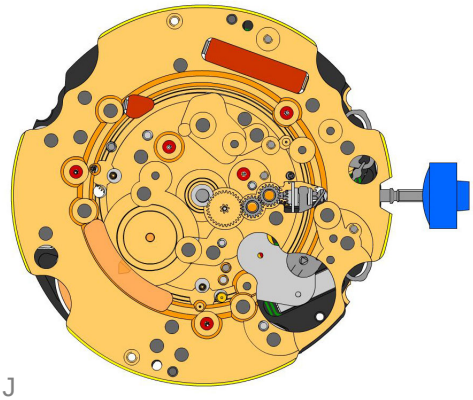


H

| | | |
|---|---|---|
| 3612.210.5030<br>47. |  | Electronic module<br>Electronic module held by 5 screws 4000.248. Electronic measurements may be realised now. |
| 4000.248<br>48. |  | Screw |
| 3603.069<br>49. |  | Circuit insulator |
| 3601.107.G<br>50. |  | Pusher contact spring |

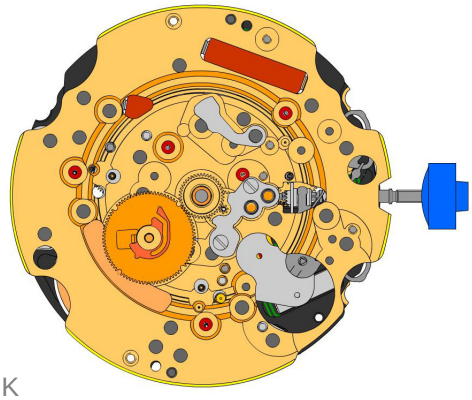


| | | |
|---|---|---|
| 2130.137.G.M01.5030D<br>51. |  | Electronic module cover<br>Electronic module cover held by 3 screws 4000.250. |
| 3600.010.HGF<br>52. |  | Battery 395 |
| 3601.109.G<br>53. |  | Bridle +<br>Bridle held by 1 screw 4000.250. |
| 4000.250<br>54. |  | Screw |



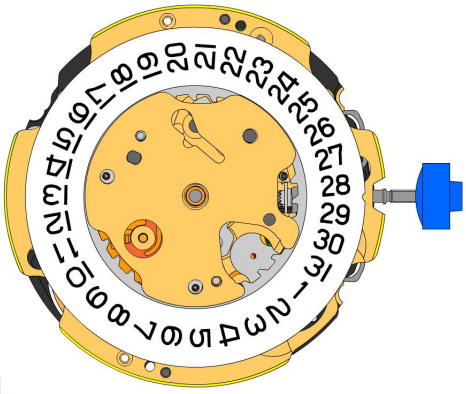
J

| | | |
|---|---|---|
| 2000.574.G<br>55. |  | Main plate |
| 3004.164<br>56. |  | Setting wheel |
| 3004.164<br>57. |  | Setting wheel |
| 3007.054.CO<br>58. |  | Minute wheel |



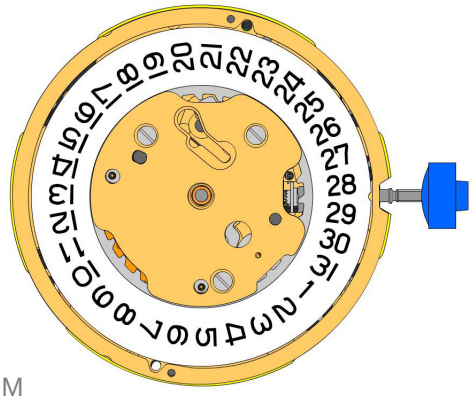
K

| | | |
|---|---|---|
| 2130.143<br>59. |  | Minute train bridge<br>Minute train bridge held by 2 screws 4000.305. |
| 4000.305<br>60. |  | Screw |
| 3301.241<br>61. |  | Hour wheel (Aig.1) |
| 3315.016<br>62. |  | Friction spring |
| 3004.224.CO<br>63. |  | Date indicator driving wheel |
| 3500.049<br>64. |  | Date jumper |



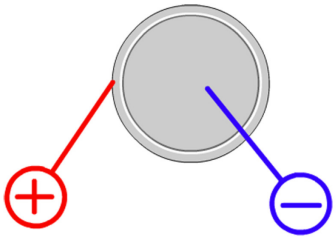
L

| | | |
|---|---|---|
| 3504.208.AB.1.A<br>65. |  | Date indicator (standard)<br>Nick of the indicator at 3 o`clock. |
| 2130.141<br>66. |  | Date indicator maintaining plate<br>Date indicator maintaining plate held by 1 screw 4000.250. |

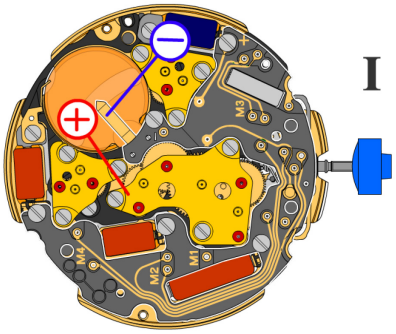


M

| | | |
|---|---|---|
| 3905.070<br>67. |  | Date jumper spring<br>Insert the date jumper spring in the provided opening. |
| 2130.140.G<br>68. |  | Date mechanism maintaining plate<br>Date mechanism maintaining plate held by 2 screws 4000.250. |
| 4000.250<br>69. |  | Screw |
| 3506.072.G<br>70. |  | Dial support |
| 8200<br>71. |  | Moebius 8200 |
| 9014<br>72. |  | Moebius 9014 |
| 124<br>73. |  | Jismaa 124 |
| 9020<br>74. |  | Moebius 9020 |

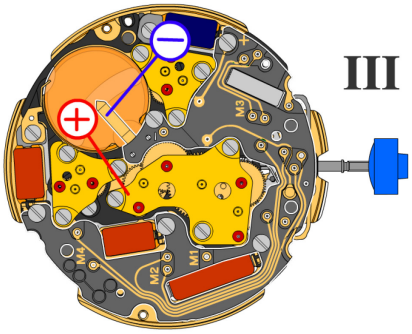


| | |
|---|---|
| Battery | **395** |
| Voltage | **1.55 V** |



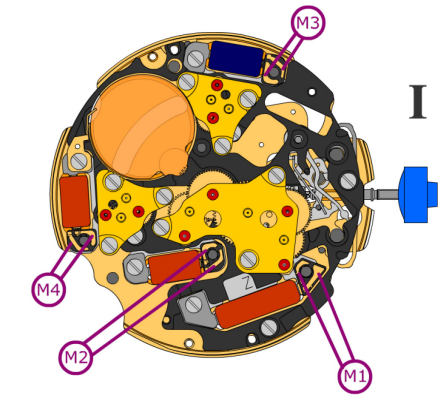

*Setting stem in position I, calendar not in gear,*
*60 s measuring interval for rate and consumption:*

| | |
|---|---|
| Typical consumption | ***1.32 µA*** |
| Maximal consumption | ***1.65 µA*** |
| Rate | **-10s/M. .. +20s/M.** |
| Lower working voltage limit | **1.20 V** |

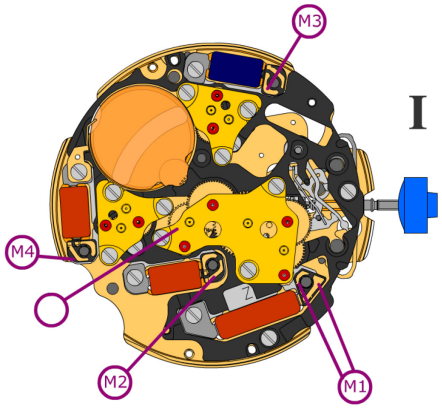



*Setting stem in position III, 60 s measuring interval:*

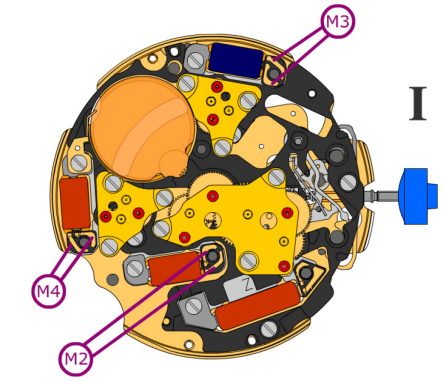
| | |
|---|---|
| Typical consumption | ***0.10 µA*** |
| Maximal consumption | ***0.30 µA*** |



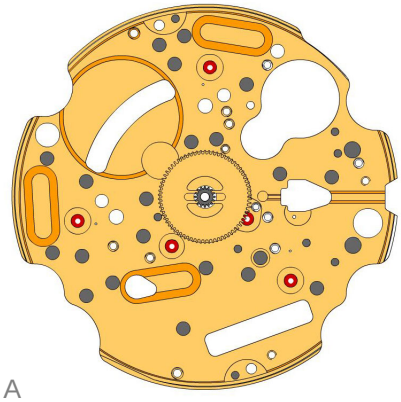

| | |
|---|---|
| Coil resistance M1 | **1.90 kΩ .. 2.10 kΩ** |
| Coil resistance M2 | **1.68 kΩ .. 1.88 kΩ** |
| Coil resistance M3 | **1.68 kΩ .. 1.88 kΩ** |
| Coil resistance M4 | **1.68 kΩ .. 1.88 kΩ** |



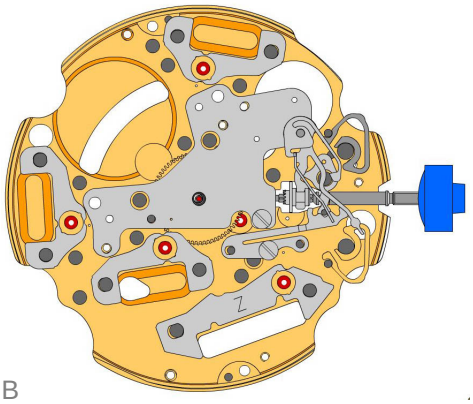

| | |
|---|---|
| Coil resistance M1/M2/M3/M4 | **∞ kΩ** |



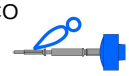

| | |
|---|---|
| *Signal generator (4.9 ms, 8 Hz):* | |
| Lower working voltage limit M2/M3/M4 | **1.20 V** |

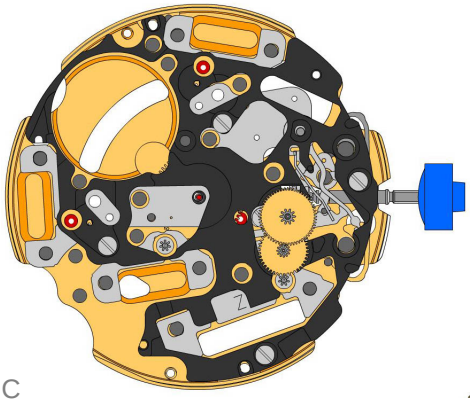


A



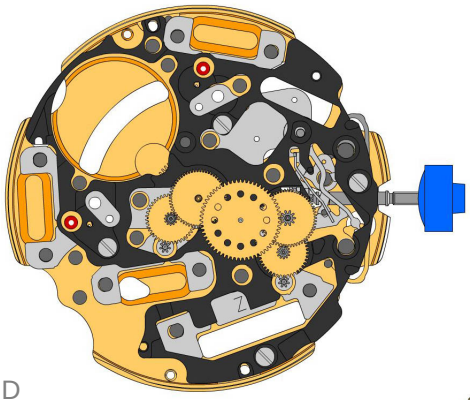
B

| | | |
|---|---|---|
| 2000.574.G<br>1. |  | Main plate |
| 3305.275.CO<br>2. |  | Cannon pinion with driver (Aig.1) |
| 2030.017.CO<br>3. |  | Centre bridge<br>Centre bridge held by 1 screw 4000.250. |
| 4000.250<br>4. |  | Screw |
| 3001.055.FI<br>5. |  | Sliding pinion |
| 3000.177.CO<br>6. |  | Setting stem |
| 3017.049<br>7. |  | Setting lever |
| 3905.049<br>8. |  | Setting lever jumper (3 positions)<br>Setting lever jumper held by 1 screw 4000.250. |
| 4000.250<br>9. |  | Screw |
| 3015.081<br>10. |  | Yoke (3 positions)<br>Parts 3015.081 and 3905.067 must be exchanged together. |
| 3905.067<br>11. |  | Yoke spring<br>Tensioning the spring arm. Parts 3015.081 and 3905.067 must be exchanged together. |
| 3406.030<br>12. |  | Pusher jumper B<br>Put the grey jumper between the two posts on the further side. |
| 3406.038<br>13. |  | Pusher jumper A<br>Put the yellow jumper between the two posts on the closer side. |
| 3622.040<br>14. |  | Stator<br>Mark \|Z\| on stator. |
| 3622.039<br>15. |  | Stator (counter 6h, 9h and chrono) |
| 3622.039<br>16. |  | Stator (counter 6h, 9h and chrono) |
| 3622.039<br>17. |  | Stator (counter 6h, 9h and chrono) |



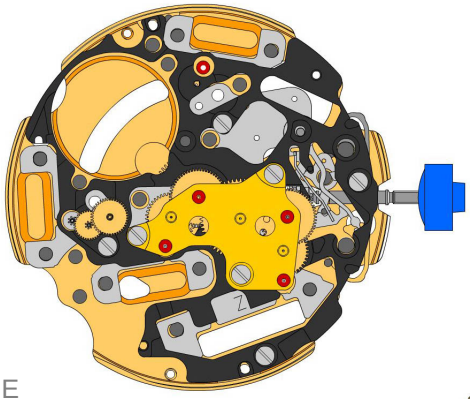
C

| | | |
|---|---|---|
| 3603.079<br>18. |  | Plastic bracket<br>Plastic bracket held by 4 screws 4000.250. |
| 4000.250<br>19. |  | Screw |
| 3715.094.RK<br>20. |  | Rotor |
| 3715.094.RK<br>21. |  | Rotor |
| 3147.046.CO<br>22. |  | Intermediate wheel |
| 3136.142.CO<br>23. |  | Second wheel (long) |



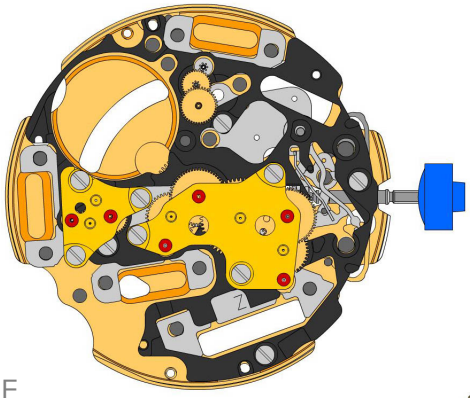
D

| | | |
|---|---|---|
| 3147.047.CO<br>24. |  | Intermediate wheel (chrono) |
| 3136.143.CO<br>25. |  | Chronograph wheel (Aig.1) |
| 3122.056.CO<br>26. |  | Third wheel |



E

| | | |
|---|---|---|
| 2020.148.G<br>27. |  | Train wheel bridge<br>Train wheel bridge held by 3 screws 4000.250. |
| 4000.250<br>28. |  | Screw |
| 3715.095.RK<br>29. |  | Rotor<br>Parts 3612.144.5030, 3715.095.RK and 3147.048.CO must be exchanged together. |
| 3147.048.CO<br>30. |  | Intermediate wheel (counter)<br>Parts 3612.144.5030, 3715.095.RK and 3147.048.CO must be exchanged together. |
| 3402.006.CO<br>31. |  | Minute counting wheel |



F

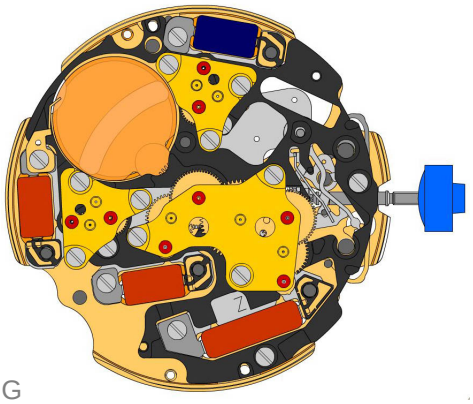
2020.149.G
32.
Counter train wheel bridge
Counter train wheel bridge held by 3 screws 4000.250.

4000.250
33.
Screw

3715.095.RK
34.
Rotor

3147.048.CO
35.
Intermediate wheel (counter 12h)

3402.006.CO
36.
Minute counting wheel



G

2020.149.G
37.
Counter train wheel bridge
Counter train wheel bridge held by 3 screws 4000.250.

4000.250
38.
Screw

3621.053.RK
39.
Coil
Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.

3621.054.RK
40.
Coil (counter 9h, chrono)
Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.

3621.054.RK
41.
Coil (counter 9h, chrono)
Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.

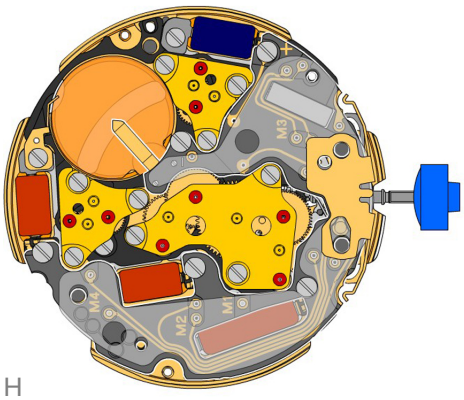
3621.055.RK
42.
Coil (counter 6h)
Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.

4000.250
43.
Screw

3601.118
44.
Contact strip
Contact strip held by 1 screw 4000.250.

4000.250
45.
Screw

3603.034
46.
Battery insulator



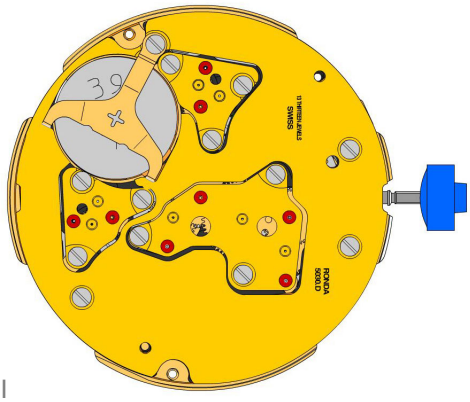
H

3612.144.5030
47.
Electronic module
Electronic module held by 5 screws 4000.248. Electronic measurements may be realised now. Parts 3612.144.5030, 3715.095.RK and 3147.048.CO must be exchanged together.

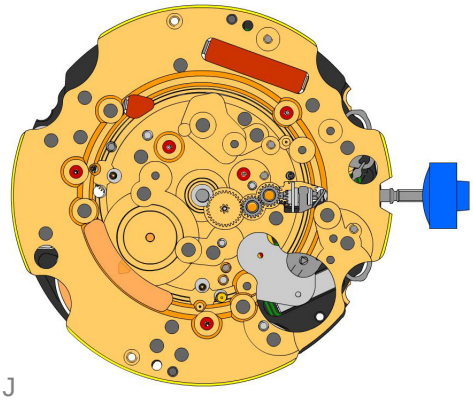
4000.248
48.
Screw

3603.069
49.
Circuit insulator

3601.107.G
50.
Pusher contact spring

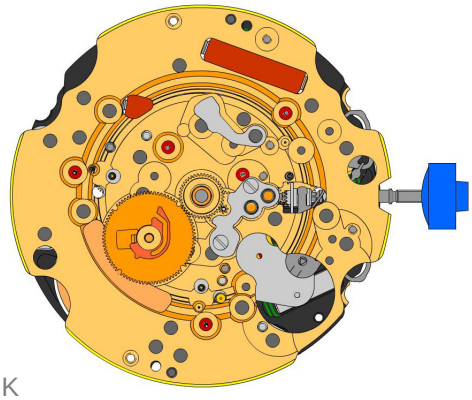


| | | |
|---|---|---|
| 2130.137.G.M01.5030D<br>51. |  | Electronic module cover<br>Electronic module cover held by 3 screws 4000.250. |
| 3600.010.HGF<br>52. |  | Battery 395 |
| 3601.109.G<br>53. |  | Bridle +<br>Bridle held by 1 screw 4000.250. |
| 4000.250<br>54. |  | Screw |



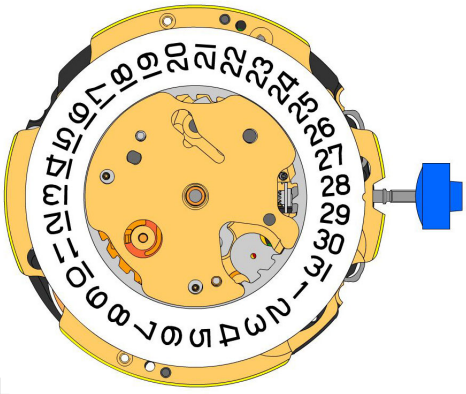
J

| | | |
|---|---|---|
| 2000.574.G<br>55. |  | Main plate |
| 3004.164<br>56. |  | Setting wheel |
| 3004.164<br>57. |  | Setting wheel |
| 3007.054.CO<br>58. |  | Minute wheel |



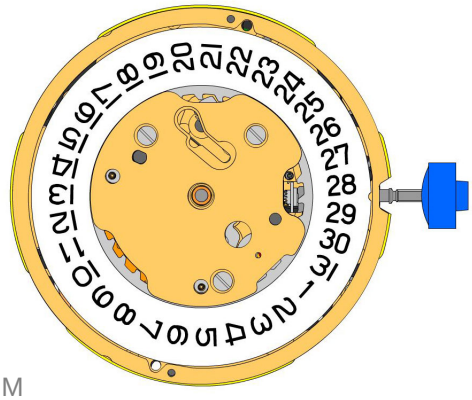
K

| | | |
|---|---|---|
| 2130.143<br>59. |  | Minute train bridge<br>Minute train bridge held by 2 screws 4000.305. |
| 4000.305<br>60. |  | Screw |
| 3301.241<br>61. |  | Hour wheel (Aig.1) |
| 3315.016<br>62. |  | Friction spring |
| 3004.224.CO<br>63. |  | Date indicator driving wheel |
| 3500.049<br>64. |  | Date jumper |




L

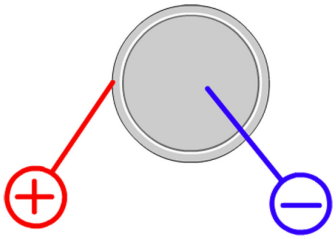
| | | |
|---|---|---|
| 3504.208.AB.1.A<br>65. |  | Date indicator (standard)<br>Nick of the indicator at 3 o`clock. |
| 2130.141<br>66. |  | Date indicator maintaining plate<br>Date indicator maintaining plate held by 1 screw 4000.250. |



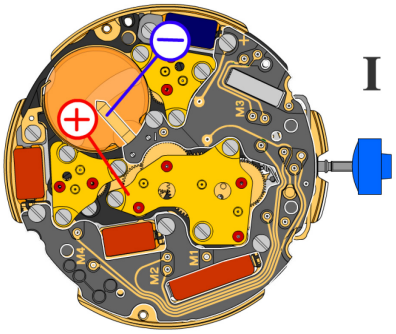
M

| | | |
|---|---|---|
| 3905.070<br>67. |  | Date jumper spring<br>Insert the date jumper spring in the provided opening. |
| 2130.140.G<br>68. |  | Date mechanism maintaining plate<br>Date mechanism maintaining plate held by 2 screws 4000.250. |
| 4000.250<br>69. |  | Screw |
| 3506.072.G<br>70. |  | Dial support |

| | | |
|---|---|---|
| 8200<br>71. |  | Moebius 8200 |
| 9014<br>72. |  | Moebius 9014 |
| 124<br>73. |  | Jismaa 124 |
| 9020<br>74. |  | Moebius 9020 |

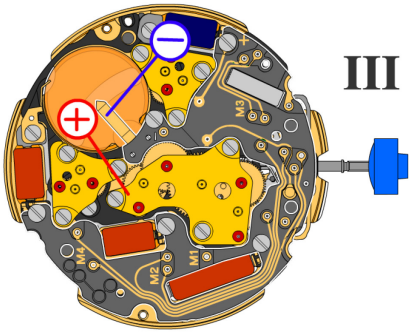


| | |
|---|---|
| Battery | **395** |
| Voltage | **1.55 V** |



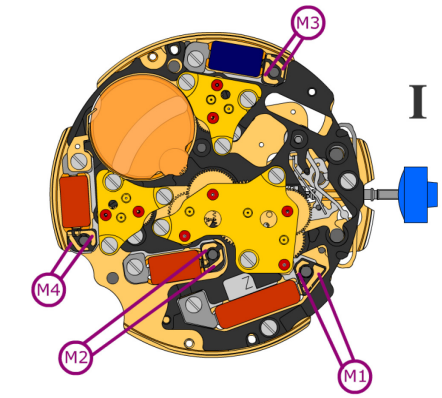

*Setting stem in position I, calendar not in gear,*
*60 s measuring interval for rate and consumption:*

| | |
|---|---|
| Typical consumption | ***1.32 µA*** |
| Maximal consumption | ***1.65 µA*** |
| Rate | **-10s/M. .. +20s/M.** |
| Lower working voltage limit | **1.20 V** |

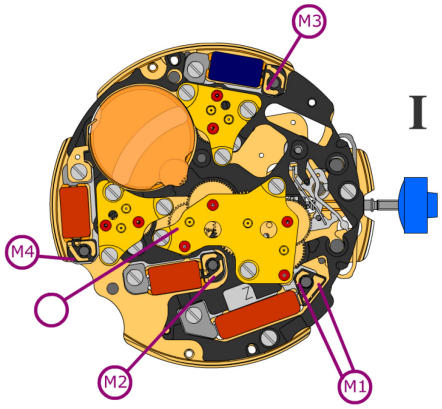



*Setting stem in position III, 60 s measuring interval:*

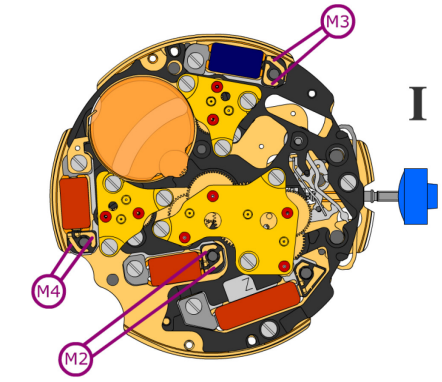
| | |
|---|---|
| Typical consumption | ***0.10 µA*** |
| Maximal consumption | ***0.30 µA*** |




| | |
|---|---|
| Coil resistance M1 | **1.90 kΩ .. 2.10 kΩ** |
| Coil resistance M2 | **1.68 kΩ .. 1.88 kΩ** |
| Coil resistance M3 | **1.68 kΩ .. 1.88 kΩ** |
| Coil resistance M4 | **1.68 kΩ .. 1.88 kΩ** |




| | |
|---|---|
| Coil resistance M1/M2/M3/M4 | **∞ kΩ** |




| | |
|---|---|
| *Signal generator (4.9 ms, 8 Hz):* | |
| Lower working voltage limit M2/M3/M4 | **1.20 V** |