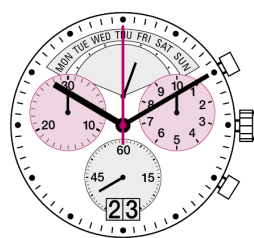


# RONDA mastertech 8000

XXL Chronographs,  
Retrograde and Big Date

*Caliber 8040.N – 15'''*



## Product Specifications

|                        |                         |
|------------------------|-------------------------|
| Analog quartz movement |                         |
| Line                   | mastertech              |
| Caliber                | 8040.N                  |
| Size                   | 15'''                   |
| Version Swiss Made     | 13 Jewels / gold plated |
| Battery life           | 48 Months               |
| Hand fitting height    | 1                       |

## Features

- Metal movement, repairable
- Very long battery life
- Power saving mechanism with pulled out stem: Reduction of consumption approximately 70%
- Very easy handling by two pushers
- Big date with quick change

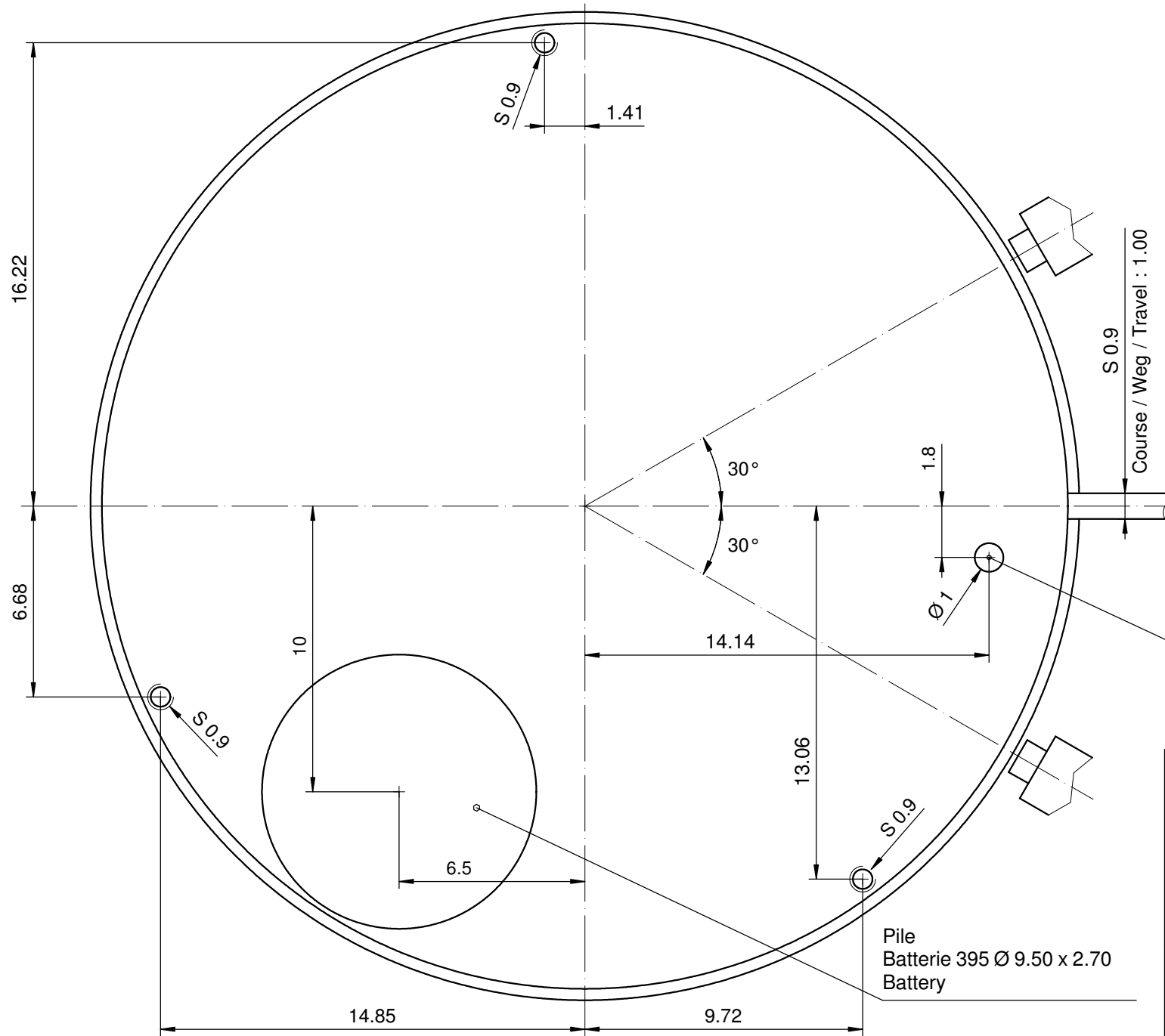
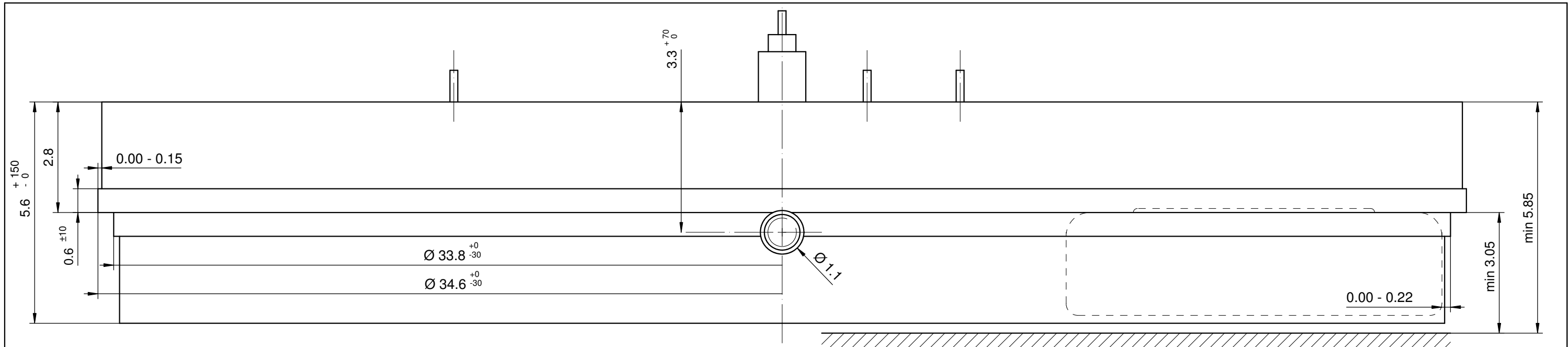
**Functions**

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

**Technical Specifications**

|  |   |
|--|---|
| Diameter Total                             | 34.60 mm                                  |
| Case fitting                               | 33.80 mm                                  |
| Movement height                            | 5.60 mm                                   |
| Height over 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                                   |
| <br>                                       |   |
| Battery type                               | 395                                       |
| Battery voltage                            | 1.5 V                                     |
| Battery life                               | 48 Months                                 |
| Current consumption – typical              | 1.48 $\mu$ A (Date Mechanism not in Gear) |
| Current consumption – maximum              | 2 $\mu$ A (Date Mechanism not in Gear)    |
| <br>                                       |   |
| Useful torque second – typical             | 6 $\mu$ Nm                                |
| Useful torque minute – typical             | 300 $\mu$ Nm                              |
| Useful torque center stop second – typical | 7 $\mu$ 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                                |

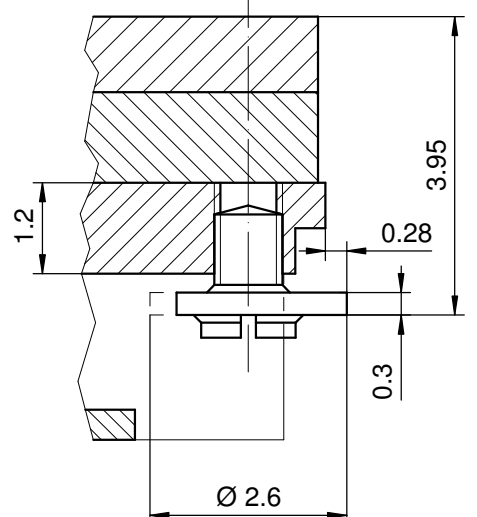
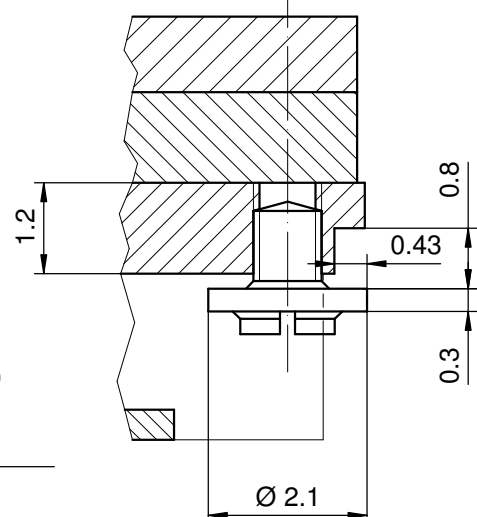
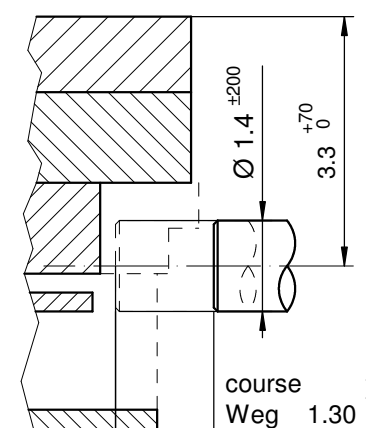




Poussoirs / Drücker / Pushers

Vis / Schraube / Screw No. : 4000.323

Vis / Schraube / Screw No. : 4000.324



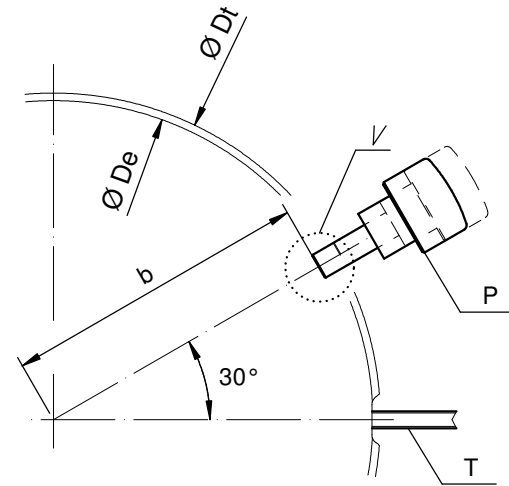
Position poussée  
Gedrückte Stellung R 16.20 ±50  
Pushed in

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

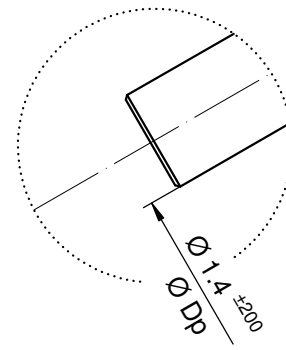
Sécurité entre l'aiguille des seconde et le verre : min 0.50 mm  
Sicherheit zwischen Sekundenzeiger und Glas : min 0.50 mm  
Security between second hand and glass : min 0.50 mm

|  |               |   |          |
|--|---------------|---|----------|
| <b>Cage<br/>Uhrwerkgestell<br/>Frame</b> | Issued        | 16 Mai 2008   | mg       |
|  | Modified      | 12 Feb 2010<br>ÄÄ 5198  | fl       |
|  | Released      | Yes   |          |
|  | Tolerance     | +/- 20 µm   |          |
|  | Scale         | 10 : 1 (5 : 1) (A3H)  |          |
| <b>RONDA</b>                             | <b>8040.N</b> | Sous réserve de modifications<br>Änderungsvorbehalten<br>Modifications reserved |          |
|  |               | No.   | 5000.367 |

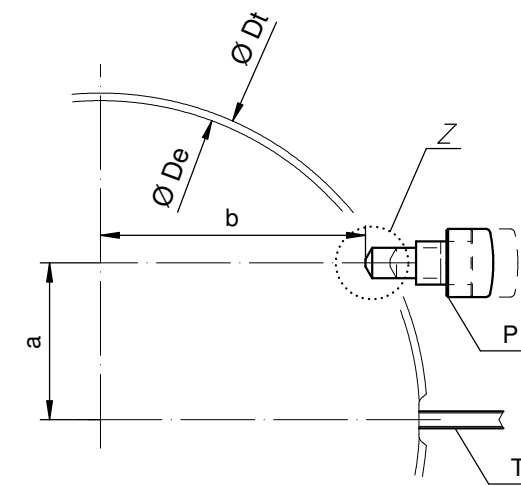
|                          |       |  |
|--------------------------|-------|--|
| Angle<br>Winkel<br>Angle | 30°   |  |
| Ø Dp                     | b     |  |
| 1.20                     | 16.20 |  |
| 1.30                     | 16.20 |  |
| 1.40                     | 16.20 |  |
| 1.50                     | 16.20 |  |
| 1.60                     | 16.20 |  |



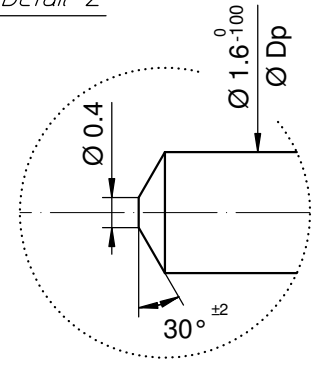
Detail V



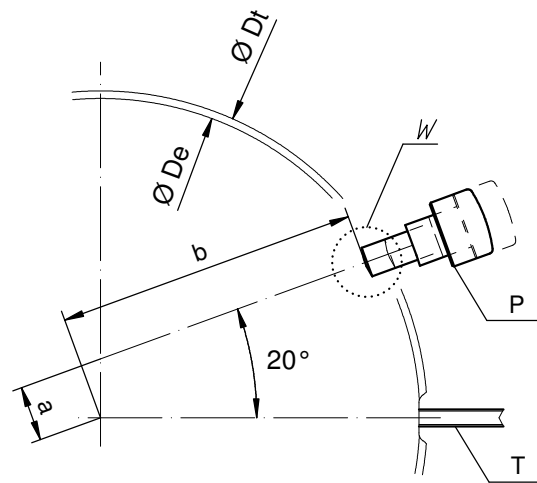
|                          |      |       |
|--------------------------|------|-------|
| Angle<br>Winkel<br>Angle | 0°   |       |
| Ø Dp                     | a    | b     |
| 1.50                     | 8.24 | 14.06 |
| 1.60                     | 8.29 | 14.03 |



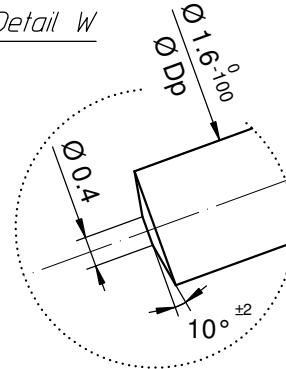
Detail Z



|                          |      |       |
|--------------------------|------|-------|
| Angle<br>Winkel<br>Angle | 20°  |       |
| Ø Dp                     | a    | b     |
| 1.50                     | 2.87 | 15.98 |
| 1.60                     | 2.92 | 15.97 |



Detail W



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

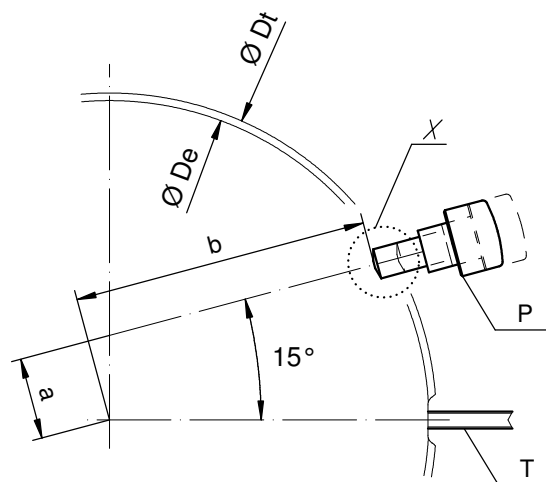
Ø Dp: diamètre du poussoir  
Drückerdurchmesser  
pusher-diameter

Ø Dt: diamètre total  
Totaldurchmesser  
total-diameter

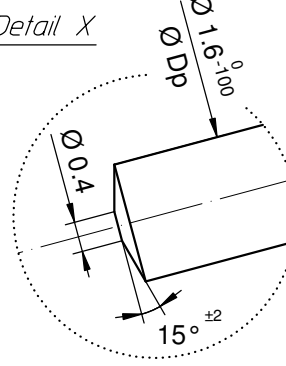
P: poussoir en position poussée  
Drücker in gedrückter Stellung  
pusher in pressed position

T: tige de mise à l'heure  
Stellwelle  
stem

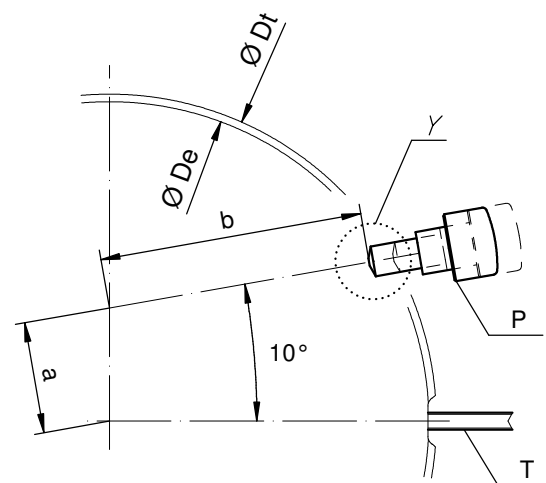
|                          |      |       |
|--------------------------|------|-------|
| Angle<br>Winkel<br>Angle | 15°  |       |
| Ø Dp                     | a    | b     |
| 1.50                     | 4.27 | 15.68 |
| 1.60                     | 4.32 | 15.67 |



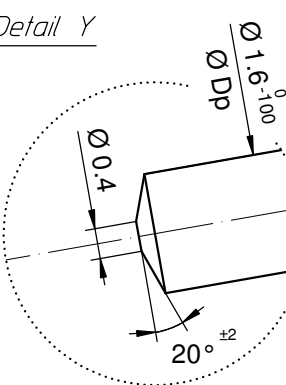
Detail X



|                          |      |       |
|--------------------------|------|-------|
| Angle<br>Winkel<br>Angle | 10°  |       |
| Ø Dp                     | a    | b     |
| 1.50                     | 5.63 | 15.26 |
| 1.60                     | 5.68 | 15.24 |



Detail Y

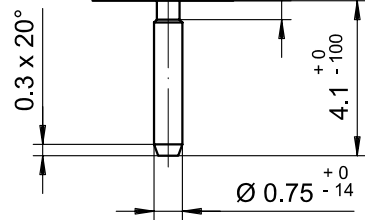
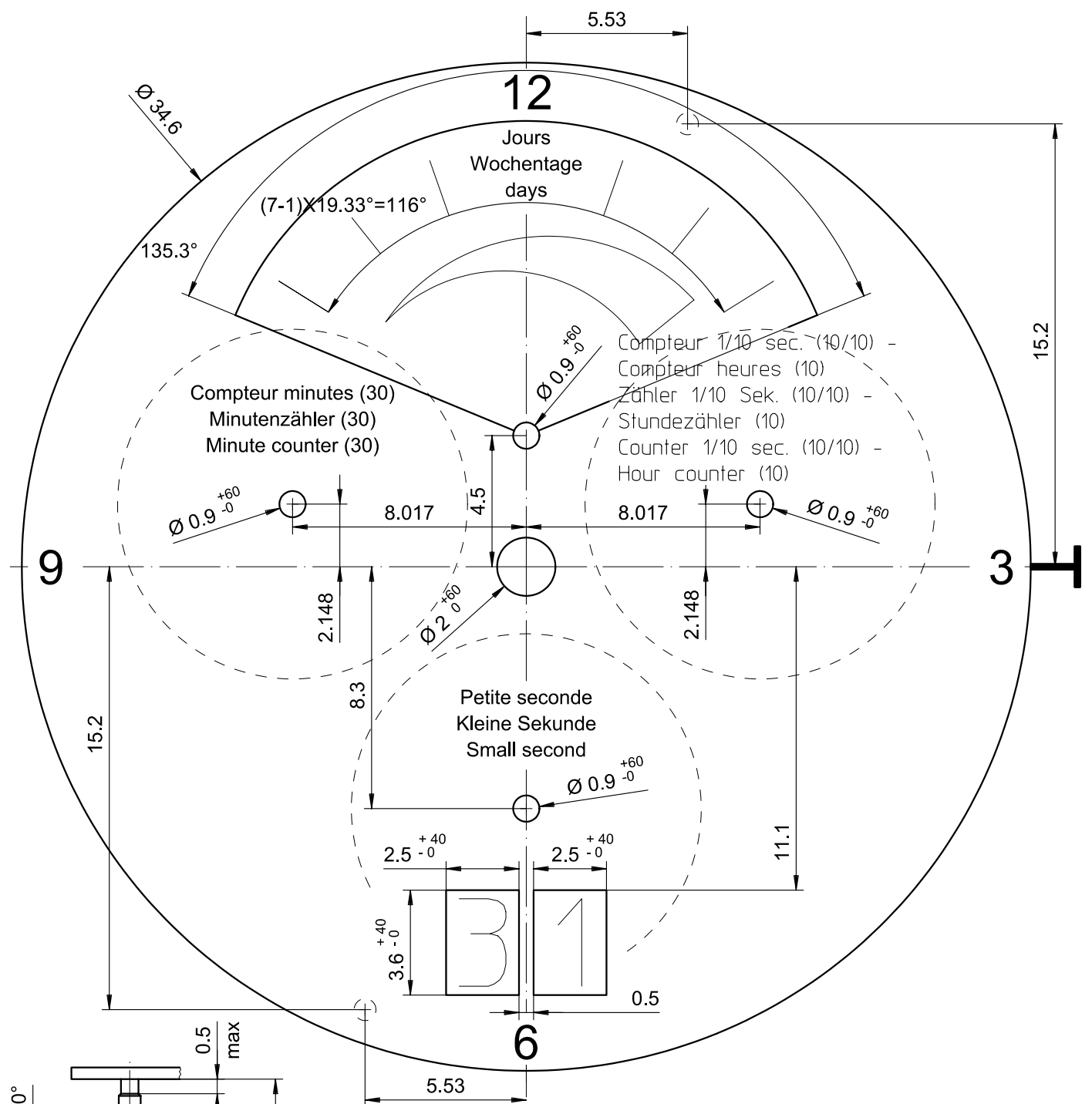


Angle des poussoirs A et B  
Winkel der Drücker A und B  
Angle of pusher A and B

RONDA 8xxx.x

|  |                        |    |
|--|------------------------|----|
| Issued   | 22 Sep 2009            | fl |
| Modified   | 12 Feb 2010<br>ÄÄ 5198 | fl |
| Released   | YES                    |    |
| Tolerance  | +/- 20 µm              |    |
| Scale  | 2.5 : 1 (10 : 1) (A3H) |    |
| Sous réserve de modifications<br>Änderungsvorbehalten<br>Modificationsreserved |                        |    |
| No.  | 5000.390               | 00 |





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

|                          |                                     |                          |
|--------------------------|-------------------------------------|--------------------------|
| Tige                     | Date                                | Jour                     |
| Stellw.                  | Datum                               | Tag                      |
| Stem                     | Date                                | Day                      |
| <b>3H</b>                | <b>6H</b>                           | <b>12H</b>               |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cadran  
 Zifferblatt  
 Dial

15'''

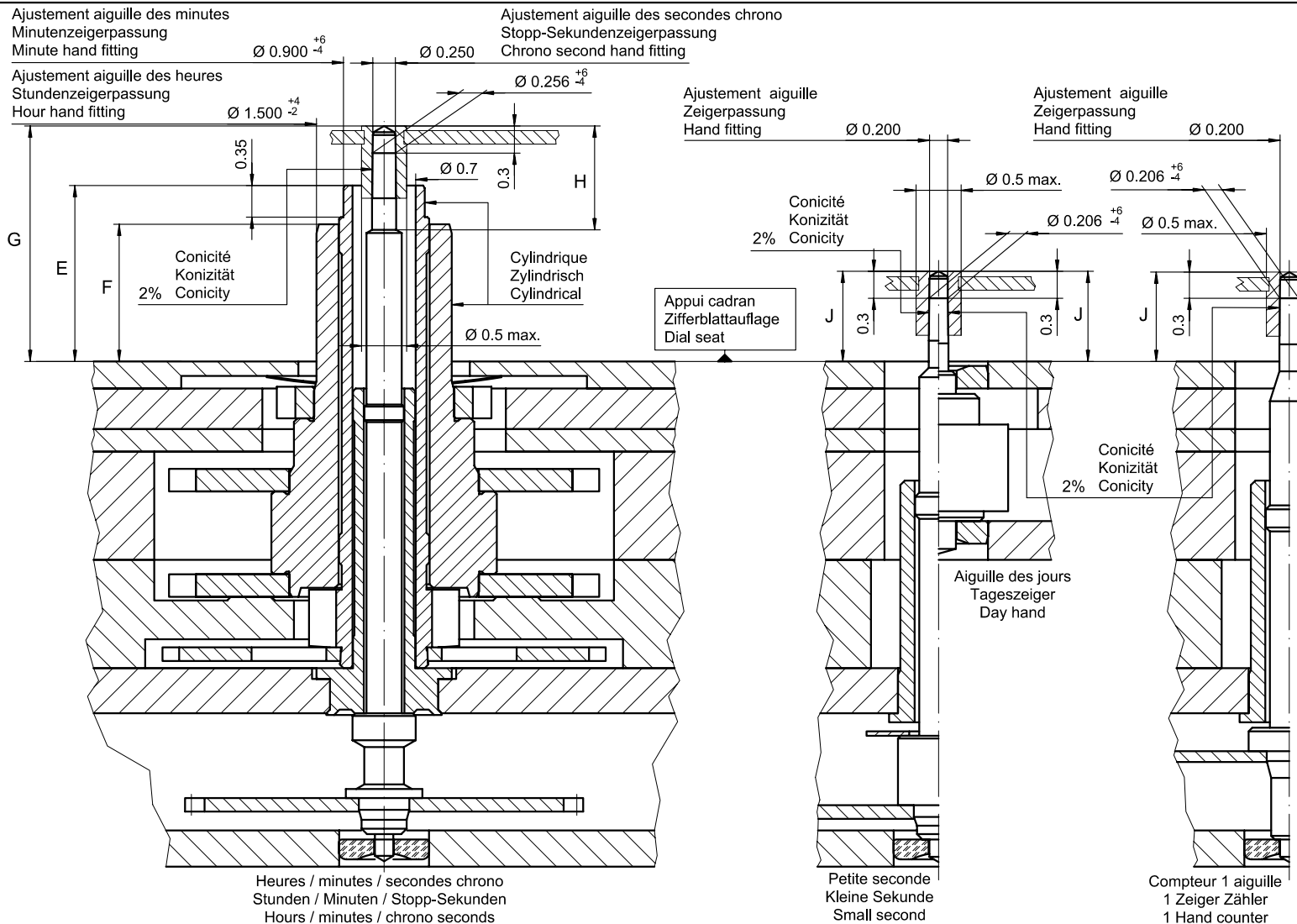
|           |                        |    |
|-----------|------------------------|----|
| Issued    | 16 Mai 2008            | mg |
| Modified  | 12 Feb 2010<br>ÄA 5198 | fl |
| Released  | YES                    |    |
| Tolerance | +/- 20 µm              |    |
| Scale     | 5 : 1 (A4V)            |    |

RONDA

8040.N

Sous réserve de modifications  
 Aenderungen vorbehalten  
 Modifications reserved

No. 5010.804 00



| Aiguillages<br>Zeigerwerkhöhe<br>Hand fitting height                 |   |  |   |  |  |   |
|--|---|--|---|--|--|---|
| Dépassement<br>Höhe über Zifferblattauflage<br>Height over dial seat |   |  |   |  |  |   |
|  | Pignon des secondes chrono<br>Stopp-Sekundentrieb<br>Chrono second pinion | Chaussée<br>Minutenrohr<br>Cannon-pinion | Roue des heures<br>Stundenrad<br>Hour wheel | Petite seconde<br>Kleine Sekunde<br>Small second | Pignon compteur<br>Zählertrieb<br>Counter pinion | Pignon des jours rétrograde<br>Tagesanzeigetrieb retrograd<br>Day pinion retrograde |
| No   | G   | E  | F   | H  | J  | J   |
| 1  | 2.61  | 1.95                                     | 1.52  | 1.15   | 1.00   | 1.00  |
| -  |   |  |   |  |  |   |

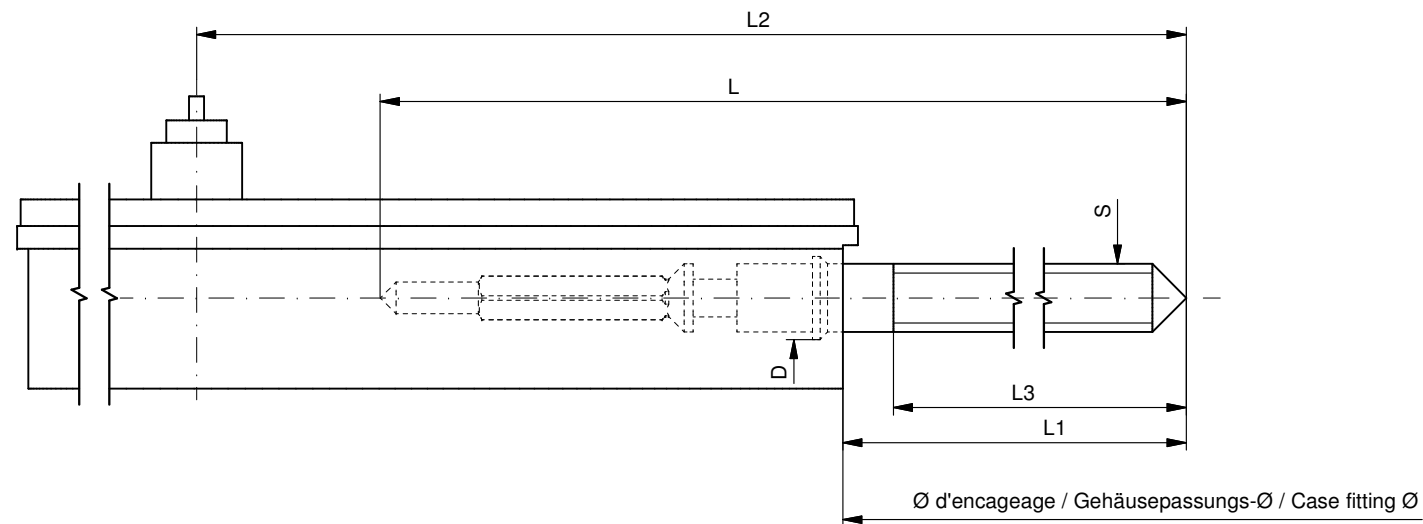
| Aiguillages<br>Zeigerwerkhöhe<br>Hand fitting height                                |   |   |  |   |  |  |   |
|---|---|---|--|---|--|--|---|
| Peinture comprise / inkl. Farbe / Paint included                                    |   |   |  |   |  |  |   |
| Epaisseur maximum du cadran<br>Maximale Zifferblattstärke<br>Maximum dial thickness |   |   |  |   |  |  |   |
| No  | Sous l'aiguille des secondes chrono<br>Unter Stopp-Sekundenzeiger<br>Under chrono second hand | Sous l'aiguille des minutes<br>Unter Minutenzeiger<br>Under minute hand | Sous l'aiguille des heures<br>Unter Stundenzeiger<br>Under hour hand | Sous l'aiguille de petite seconde<br>Unter kleine Sekundenzeiger<br>Under small second hand | Sous l'aiguille compteur 1 aiguille<br>Unter Zeiger 1 Zeiger Zähler<br>Under hand 1 hand counter | Sous l'aiguille des jours rétrograde<br>Unter Tageszeiger retrograd<br>Under Day hand retrograde | Epaisseur des aiguilles<br>Zeigerdicke<br>Hands thickness |
| No  | 1   | 2.10  | 1.55   | 1.10  | 0.55   | 0.55   | 0.55  |
| -   |   |   |  |   |  |  |   |

|                       | Aig. des sec. chrono<br>Stopp-Sekundenzeiger<br>Chrono second hand | Aig. des minutes<br>Minutenzeiger<br>Minute hand | Aig. des heures<br>Stundenzeiger<br>Hour hand | Aig. petite secondes<br>Kleine Sekundenzeiger<br>Small second hand | Aiguille compteur minute<br>Zähler Zeiger Minute<br>Counter hand minute | Aiguille compteur 1/10 sec.<br>Zähler Zeiger 1/10 Sek.<br>Counter hand 1/10 sec. | Aig. des jours rétrograde<br>Tagesanzeiger retrograd<br>Day hand retrograde | Lors de la pose d'aiguilles, le mouvement doit être soutenu.<br>Beim Zeigersetzen muss das Werk abgestützt werden.<br>The movement needs to be supported for hand setting. |
|-----------------------|--|--|---|--|---|--|---|--|
| mg max.               | 10   | 30   | 30  | 10   | 10  | 10   | 10  | Masse / Masse / weight   |
| µNm max.              | 0.06   | 0.80   | 0.80  | 0.07   | 0.03  | 0.02   | 0.40  | Balourd / Unwucht / unbalance  |
| gmm <sup>2</sup> max. | 1.0  | --   | --  | 0.4  | 1.0   | 1.0  | 1.0   | Inertie / Massenträgheit / Inertia   |
| N max.                | 30   | 40   | 40  | 30   | 30  | 30   | 30  | Force de chassage / Aufpresskraft / Force  |

Sous réserve de toutes modifications / Aenderungen vorbehalten / All modifications reserved

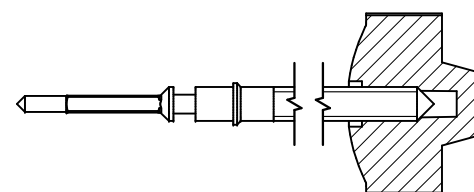
|   |  |                       |    |
|---|--|-----------------------|----|
| <b>Aiguillages<br/>Zeigerwerkhöhen<br/>Hand fitting heights</b> | Issued   | 02 Jun 2008           | mg |
|   | Modified   | 02.08.2010<br>AA 2120 | dh |
|   | Released   | Yes                   |    |
|   | Tolerance  | µm                    |    |
|   | Scale  | 20 : 1 (A3H)          |    |
| <b>RONDA 8040.N</b>   | Sous réserve de modifications / Aenderungen vorbehalten / Modifications reserved |                       |    |
|   | No.  | 3316.122              | 01 |

\* 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)

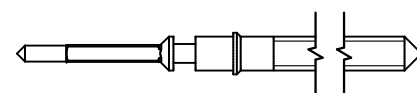
| No. d'article<br>Artikelnummer<br>Part number | L     | L1    | L2    | L3    | S    | D    |
|---|-------|-------|-------|-------|------|------|
| 3000.203.CO                                   | 21.30 | 11.67 | 28.57 | 11.12 | 0.90 | 1.10 |



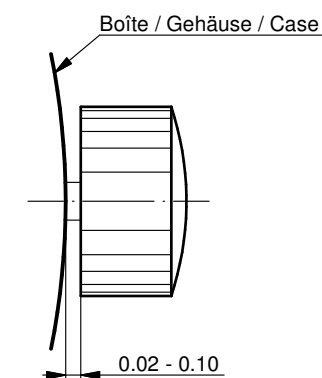
|  |                                       |
|--|---------------------------------------|
| Couleur de la couronne<br>Kronenfarbe<br>Crown color | gris foncé<br>dunkelgrau<br>dark grey |
| Code   | UN 7005                               |

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

| No. d'article<br>Artikelnummer<br>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

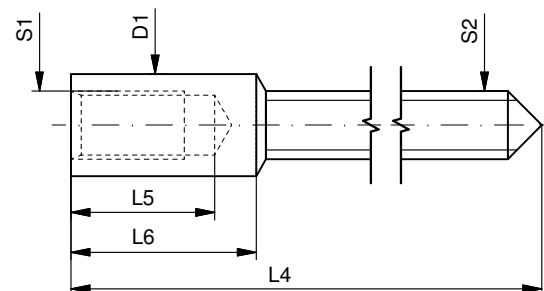


Couronne vissée  
 Geschraubte Krone  
 Screwed crown

|  |      |
|--|------|
| Force ⇐ min.<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        | 2.45 | 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  | ---         | ds5222 |
| Released  | ÄÄ 11741    |        |
| Tolerance | YES         |        |
| Scale     | 10:1 (A3)   |        |

Sous réserve de modifications  
 Änderungen vorbehalten  
 Modifications reserved

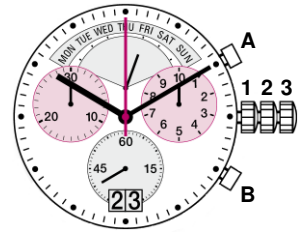
|     |          |    |
|-----|----------|----|
| No. | 5030.023 | 00 |
|-----|----------|----|

|   |  |                             |
|---|--|-----------------------------|
|  | <b>T2 Information</b>                                  | <b>DOMVT096e</b>            |
|   |  | <b>Version: 1.1</b>         |
|   | <b>Casing instructions<br/>RONDA mastertech 8040.N</b> | <b>Prozess: 3.1.3</b>       |
|   |  | <b>Änd. Dat: 30.04.2010</b> |

→ 5331 (RONDA WEB PAGE)

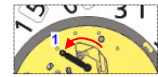
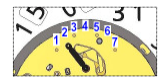
**Information & references**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Case &amp; pushers</li> <li>• Dial, positions of counters &amp; day</li> <li>• Hand fitting heights &amp; specifications for hands</li> <li>• Adjustment of functions</li> </ul> | <ul style="list-style-type: none"> <li>→ Frame drawing</li> <li>→ Dial drawing</li> <li>→ Hand fitting heights drawing</li> <li>→ User's manual</li> </ul> |
|---|--|



**Dial & hand setting**

1. Note the by the working hand indicated day (example: 2 = TUE = Tuesday)
  2. Remove working hands
  3. Set dial
  4. Set WEEKDAY hand to the same day (example: 2 = TUE = Tuesday)
- or
1. Stem in position 3: Turn crown forwards until weekday hand has jumped back to Position 1
  2. Remove working hands
  3. Set dial
  4. Set WEEKDAY hand to Monday
5. Set SECOND hand, HOUR and MINUTE counters to arbitrary index
  6. Stem in position 2: Turn crown backwards until date **02** is indicated
  7. Stem in position 3: Turn crown forwards until date has jumped from **02** to **03**
  8. Set HOUR and MINUTE hands to 12 o'clock
  9. Set SECOND counter to arbitrary index



**Calendar changing phases & times**

- Date ~ 1½ - 2 h
- Weekday ~ ¾ - 2 h after the date change

**Remark**  
During the date setting with quick mode (stem in position 2), the speed may not exceed 5 days / second.

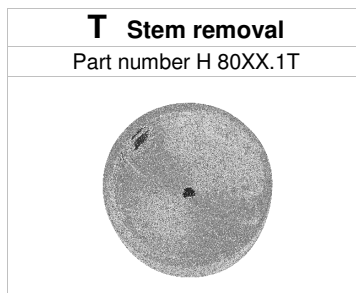
**Initialisation of chronograph hands**

10. To ensure proper positioning of the chronograph hands to the zero position, a complete initialisation must be issued after the hand setting operation is completed. Viz.: Each counter must be adjusted 1x to the zero position.
11. End: Push stem back in position 1.

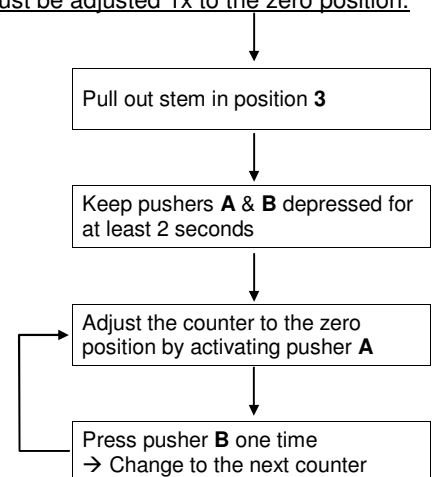
**Movement holder**




The movement needs to be supported for hand setting.  
Maximal force:  
Hour & minute hands: max. 40N  
All other hands: max. 30N



For removal of the stem, the stem must be pushed into position 1 (pressed in) prior to apply pressure to the setting lever.








**Information re BIG DATE**  
An extreme acceleration in setting the date with quick mode (BIG DATE) can induce a false date indication. The synchronization is re-established by setting the date from 01 till 31 (stem in position 2).

|   |  |                              |
|---|--|------------------------------|
|  | <b>Werkhalter T2</b><br><b>Porte-pièce T2</b><br><b>Movement holder T2</b>       | <b>DOMVT004</b>              |
|   |  | <b>Version: 1.8</b>          |
|   | Verwendung & Übersicht<br>Utilisation & Vue d'ensemble<br>Utilisation & Overview | <b>Prozess: 3.1.3</b>        |
|   |  | <b>Änd.-Dat.: 15.07.2013</b> |

→ 5110, 5112, 5150, 5151, 5152, 5160, 5161, 5163, 5164, 5166, 5310, 5311, 5312, RTC, RHK

→ Ermano, Pine Precision


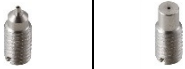







→ AF Switzerland SA, Horotec SA, Tschudin & Schneider

|   |  |   |  |
|---|--|---|--|
|   | <b>A</b> Zeiger setzen<br>Poser les aiguilles<br>Hand setting  | <b>T</b> Stellwelle entfernen<br>Enlever la tige<br>Stem removal                                      | Diverses<br>Divers<br>Various                    |
| Kalibergruppe<br>Groupe de calibre<br>Calibre group   | Artikelnummer<br>Numéro d'article<br>Part number   | Artikelnummer<br>Numéro d'article<br>Part number  | Artikelnummer<br>Numéro d'article<br>Part number |
| Z60<br><br>Z60  | H 80XX.1A<br><br>  | H 80XX.1T<br><br>  |  |
| 8000-8499<br><br>8040.B<br>8040.N                     | H 80XX.1A<br><br> | H 80XX.1T<br><br> |  |
| 7000-7999<br><br>700X.B<br>700X.L<br>700X.N<br>700X.P | H 7XXX.1A<br><br> | H 7XXX.1T<br><br> |  |

**Wichtig!** Die Höhe der Abstützschrauben muss vor Beginn jeder Serie eingestellt werden.

**Important!** Veuillez ajuster l'hauteur des vis de support au préalable de chaque série.

**Important!** Adjust height of support screws prior to each series.

|   |  |   |  |
|---|--|---|--|
|   | <p><b>A</b> Zeiger setzen<br/>Poser les aiguilles<br/>Hand setting</p>   | <p><b>T</b> Stellwelle entfernen<br/>Enlever la tige<br/>Stem removal</p>                             | <p><b>P</b> Alarm-Check<br/>Contrôle d'alarme<br/>Alarm check</p>                                      |
| <p>Kalibergruppe<br/>Groupe de calibre<br/>Calibre group</p>                                      | <p>Artikelnummer<br/>Numéro d'article<br/>Part number</p>  | <p>Artikelnummer<br/>Numéro d'article<br/>Part number</p>   | <p>Artikelnummer<br/>Numéro d'article<br/>Part number</p>  |
| <p>6000-6999</p> <p>6XXX.B<br/>6XXX.D</p>   | <p>H 6XXX.1A</p>  <p>Swiss Made   Swiss Parts</p>  | <p>H 6XXX.1T</p>    |  |
| <p>4000-5999.B/.C/.D/.E</p> <p>4XXX.B<br/>5XXX.B<br/>5XXX.C<br/>5XXX.D<br/>5XXX.E</p>             | <p>H 5XXX.1A</p>   | <p>H 5XXX.1T</p>  | <p>H 5XXX.1P</p>  |
| <p>4000-5999.F</p> <p>5XXX.F<br/>(4XXX.B)<br/>(5XXX.B)<br/>(5XXX.C)<br/>(5XXX.D)<br/>(5XXX.E)</p> | <p>H 5XXX.FA</p>    | <p>H 5XXX.1T</p>  | <p>H 5XXX.1P</p>  |

**Wichtig!** Die Höhe der Abstützschrauben muss vor Beginn jeder Serie eingestellt werden.  
**Important!** Veuillez ajuster l'hauteur des vis de support au préalable de chaque série.  
**Important!** Adjust height of support screws prior to each series.

|   |   |  |  |
|---|---|--|--|
|   | <b>A</b> Zeiger setzen<br>Poser les aiguilles<br>Hand setting | <b>T</b> Stellwelle entfernen<br>Enlever la tige<br>Stem removal | Diverses<br>Divers<br>Various                    |
| Kalibergruppe<br>Groupe de calibre<br>Calibre group | Artikelnummer<br>Numéro d'article<br>Part number              | Artikelnummer<br>Numéro d'article<br>Part number                 | Artikelnummer<br>Numéro d'article<br>Part number |

|                  |
|------------------|
| 3500-3999        |
| 3520.D<br>3540.D |



|                              |
|------------------------------|
| 1062-1069                    |
| 1062<br>1063<br>1064<br>1069 |
| 1062                         |
| 1063                         |
| 1064                         |
| 1069                         |



|      |
|------|
| 1042 |
| 1042 |



**Wichtig!** Die Höhe der Abstützschrauben muss vor Beginn jeder Serie eingestellt werden.  
**Important!** Veuillez ajuster l'hauteur des vis de support au préalable de chaque série.  
**Important!** Adjust height of support screws prior to each series.



|   |  |   |  |
|---|--|---|--|
|   | <b>A</b> Zeiger setzen<br>Poser les aiguilles<br>Hand setting  | <b>T</b> Stellwelle entfernen<br>Enlever la tige<br>Stem removal                                      | Diverses<br>Divers<br>Various                    |
| Kalibergruppe<br>Groupe de calibre<br>Calibre group           | Artikelnummer<br>Numéro d'article<br>Part number   | Artikelnummer<br>Numéro d'article<br>Part number  | Artikelnummer<br>Numéro d'article<br>Part number |
| 1032<br><br>1032  | H 1032.1A<br><br>   | H 1032.1T<br><br>   |  |
| 1012-1019<br><br>1012<br>1013<br>1014<br>1015<br>1016<br>1019 | H 101X.1A<br><br>  | H 101X.1T<br><br>  |  |
| 1002-1009<br><br>1002<br>1003<br>1004<br>1005<br>1006<br>1009 | H 100X.1A<br><br> | H 100X.1T<br><br> |  |

**Wichtig!** Die Höhe der Abstützschrauben muss vor Beginn jeder Serie eingestellt werden.  
**Important!** Veuillez ajuster l'hauteur des vis de support au préalable de chaque série.  
**Important!** Adjust height of support screws prior to each series.






|   |   |  |  |
|---|---|--|--|
|   | <b>A</b> Zeiger setzen<br>Poser les aiguilles<br>Hand setting | <b>T</b> Stellwelle entfernen<br>Enlever la tige<br>Stem removal | Diverses<br>Divers<br>Various                    |
| Kalibergruppe<br>Groupe de calibre<br>Calibre group | Artikelnummer<br>Numéro d'article<br>Part number              | Artikelnummer<br>Numéro d'article<br>Part number                 | Artikelnummer<br>Numéro d'article<br>Part number |

|                                 |
|---------------------------------|
| 782-788                         |
| 782<br>783<br>784<br>785<br>788 |

|   |   |
|---|---|
| H 78X.1A  |   |
|  |   |
| Swiss Made  | Swiss Parts   |
|  |  |

|  |
|--|
| H 78X.1T   |
|  |

|                          |
|--------------------------|
| 772-775                  |
| 772<br>773<br>774<br>775 |





|   |   |
|---|---|
| H 77X.1A  |   |
|  |   |
| Swiss Made  | Swiss Parts   |
|  |  |

|  |
|--|
| H 77X.1T   |
|  |

**Wichtig!** Die Höhe der Abstützschrauben muss vor Beginn jeder Serie eingestellt werden.  
**Important!** Veuillez ajuster l'hauteur des vis de support au préalable de chaque série.  
**Important!** Adjust height of support screws prior to each series.



|   |   |  |  |
|---|---|--|--|
|   | <b>A</b> Zeiger setzen<br>Poser les aiguilles<br>Hand setting | <b>T</b> Stellwelle entfernen<br>Enlever la tige<br>Stem removal | Diverses<br>Divers<br>Various                    |
| Kalibergruppe<br>Groupe de calibre<br>Calibre group | Artikelnummer<br>Numéro d'article<br>Part number              | Artikelnummer<br>Numéro d'article<br>Part number                 | Artikelnummer<br>Numéro d'article<br>Part number |

|                            |
|----------------------------|
| 762-763                    |
| 762<br>762E<br>763<br>763E |
| 762<br>762E<br>763<br>763E |

|   |   |
|---|---|
| H 76X.1A  |   |
|    |   |
| Swiss Made  | Swiss Parts   |
| -   | -   |
|   | -   |
|  |  |



|            |
|------------|
| 751-753    |
| 751<br>753 |
| 751<br>753 |




|   |   |
|---|---|
| H 75X.1A  |   |
|  |   |
| Swiss Made  | Swiss Parts   |
| -   | -   |
|  |  |



**Wichtig!** Die Höhe der Abstützschrauben muss vor Beginn jeder Serie eingestellt werden.  
**Important!** Veuillez ajuster l'hauteur des vis de support au préalable de chaque série.  
**Important!** Adjust height of support screws prior to each series.


|   |   |  |  |
|---|---|--|--|
|   | <b>A</b> Zeiger setzen<br>Poser les aiguilles<br>Hand setting | <b>T</b> Stellwelle entfernen<br>Enlever la tige<br>Stem removal | Diverses<br>Divers<br>Various                    |
| Kalibergruppe<br>Groupe de calibre<br>Calibre group | Artikelnummer<br>Numéro d'article<br>Part number              | Artikelnummer<br>Numéro d'article<br>Part number                 | Artikelnummer<br>Numéro d'article<br>Part number |

|                          |
|--------------------------|
| 712-715                  |
| 712<br>713<br>714<br>715 |

|   |   |
|---|---|
| <b>H 71X.1A</b>   |   |
|  |   |
| Swiss Made  | Swiss Parts   |
|  |  |


|  |
|--|
| <b>H 71X.1T</b>  |
|  |

|  |
|--|
| 702-708                                  |
| 702<br>703<br>704<br>705<br>708<br>(706) |

|   |   |
|---|---|
| <b>H 70X.1A</b>   |   |
|  |   |
| Swiss Made  | Swiss Parts   |
|  |  |







|  |
|--|
| <b>H 70X.1T</b>  |
|  |

|                                  |
|----------------------------------|
| 706                              |
| 706.1<br>706.2<br>706.3<br>706.B |

|   |   |
|---|---|
| <b>H 706.1A</b>   |   |
|    |   |
| Swiss Made  | Swiss Parts   |
|  6h  |  6h  |
|   |   |

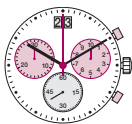
|  |
|--|
| <b>H 70X.1T</b>  |
|  |

**Wichtig!** Die Höhe der Abstützschrauben muss vor Beginn jeder Serie eingestellt werden.  
**Important!** Veuillez ajuster l'hauteur des vis de support au préalable de chaque série.  
**Important!** Adjust height of support screws prior to each series.

|   |   |  |  |
|---|---|--|--|
|   | <b>A</b> Zeiger setzen<br>Poser les aiguilles<br>Hand setting                                       | <b>T</b> Stellwelle entfernen<br>Enlever la tige<br>Stem removal                                     | Diverses<br>Divers<br>Various                    |
| Kalibergruppe<br>Groupe de calibre<br>Calibre group | Artikelnummer<br>Numéro d'article<br>Part number  | Artikelnummer<br>Numéro d'article<br>Part number   | Artikelnummer<br>Numéro d'article<br>Part number |
| 582-585<br><br>582<br>583<br>585                    | H 58X.1A<br><br>   | H 58X.1T<br><br>   |  |
| 512-519<br><br>512<br>513<br>515<br>517<br>519      | H 51X.1A<br><br>  | H 51X.1T<br><br>  |  |
| 502-509<br><br>502<br>503<br>505<br>507<br>509      | H 50X.1A<br><br> | H 50X.1T<br><br> |  |

**Wichtig!** Die Höhe der Abstützschrauben muss vor Beginn jeder Serie eingestellt werden.  
**Important!** Veuillez ajuster l'hauteur des vis de support au préalable de chaque série.  
**Important!** Adjust height of support screws prior to each series.

Cal. 8040.N



Cal. 8040.B

RONDA is a supplier of watch movements including their operating instructions. Please refer to the watch retailer, service centre or manufacturer, should you have any questions regarding the watch. All relevant contact information can be found in your sales and/or guarantee documents.

## English User's Manual

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



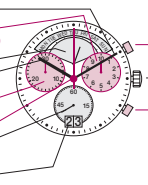
### Description of the display and control buttons

#### Display elements

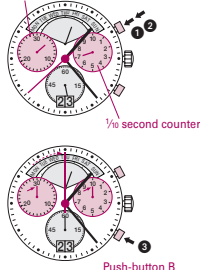
- Minute hand
- 1/2 second counter (hour counter after 30 minutes)
- Day Retrograde
- Hour hand
- Minute counter
- Centre stop-second
- Second hand
- Date

#### Control buttons

- Push-button A
- Crown
- Push-button B



### Minute counter Push-button A

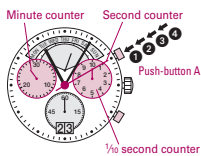


### Chronograph: Basic function

(Start / Stop / Reset)

Example:

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



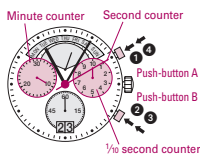
### Chronograph: Accumulated timing

Example:

- Start:** (start timing)
- Stop:** (e.g. 15 min 5 sec following 1)
- Restart:** (timing is resumed)
- Stop:** (e.g. 13 min 5 sec following 3)  
= **28 min 10 sec**  
(The accumulated measured time is shown)

- Reset:**  
The three 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, ...)

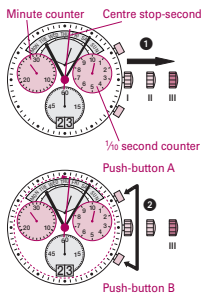


### Chronograph: Intermediate or interval timing

Example:

- Start:** (start timing)
- Display interval:** e.g. 10 minutes, 0 seconds (timing continues in the background)
- Making up the measured time:** (the three chronograph hands are quickly advanced to the ongoing measured time).
- Stop:** (Final time is displayed)
- Reset:** The three chronograph hands are returned to their zero position

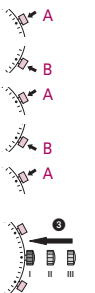
**Please note:**  
\* Following 2, further intervals or intermediate times can be displayed by pressing push-button B (display interval / make up measured time, ...)



### 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 three chronograph hands are in their correct or incorrect zero position).
- Keep push-buttons A and B depressed simultaneously for at least 2 seconds (the centre stop-second rotates by 360° → corrective mode is activated).



Adjusting the centre stop second  
Single step: A 1 x short  
Continuous: A long

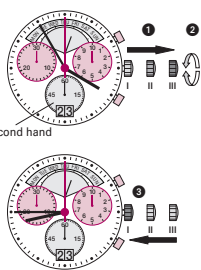
Adjusting the next hand B

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 9h)  
Single step: A 1 x short  
Continuous: A long

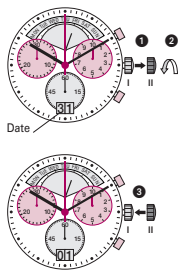
- Returning the crown to position I  
Termination of the chronograph hands adjustment (can be carried out at any time).



### 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.

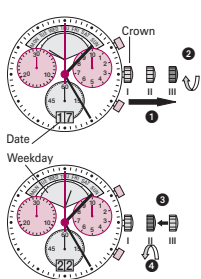
**Please note:**  
\* In order to set the time to the exact second, 2 must be pulled out when the second hand is in position «60». Once the hour and minute hands have been set, 2 must be pushed back into position I at the exact second.



### Setting the date (quick mode)

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

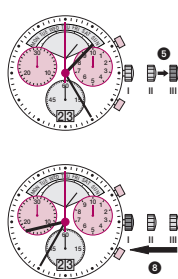
**Please note:**  
During the date changing phase between 9 PM and 12 PM, the date must be set to the date of the following day.  
An extreme acceleration in setting the date with quick mode can induce a false date indication. The synchronization is re-established by setting the date from 01 till 31 (crown in position II).



### Setting the date, weekday (8040.N), time

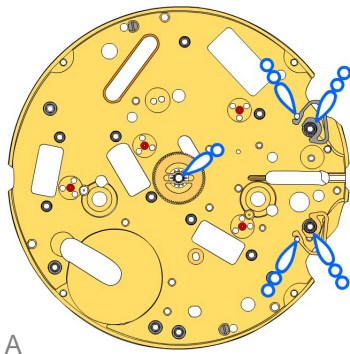
Example:  
- Date / time on the watch: 17 / 01:25 / MON  
- Present date / time: 22 / 20:35 / SAT





- Pull out the crown to position III (the watch stops).
- Turn the crown until yesterday's weekday FRI appears.
- Push the crown to position II.
- Turn the crown backwards until yesterday's date appears 21.

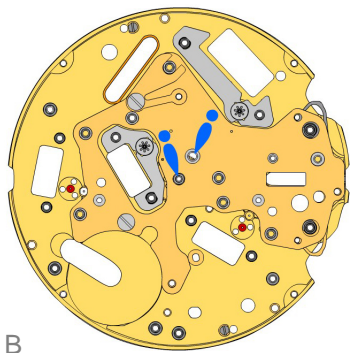










- Pull out the crown to position III (the watch stops).
- Turn the crown until the correct date 22 and weekday SAT appears.
- \*\* Continue to turn the crown until the correct time 8:35 PM appears.
- Push the crown back into position I.

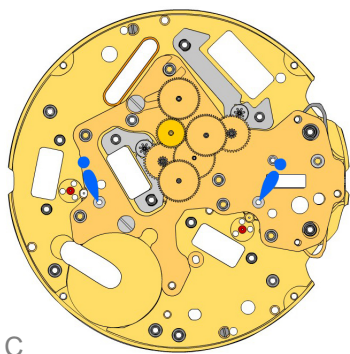
**Please note:**  
\* To set your watch to the exact second, please refer to the chapter entitled «setting the time».  
\*\* Please observe the AM/PM clock rhythm.










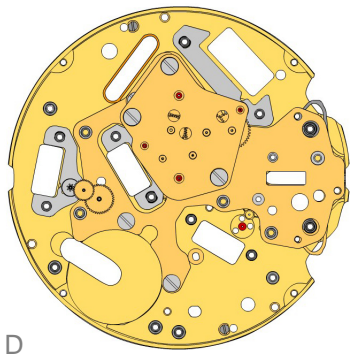
|                   |   |   |
|-------------------|---|---|
| 2000.700.CO<br>1. |  | Main plate  |
| 3406.038<br>2.    |  | Pusher jumper A<br>Put the yellow jumper between the two posts on the closer side.-#13; |
| 3406.030<br>3.    |  | Pusher jumper B<br>Put the grey jumper between the two posts on the further side.       |
| 3305.364.CO<br>4. |  | Canon pinion (Aig.1)  |



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



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



2020.188.G  
20.



**Train wheel bridge**  
Train wheel bridge held by 2 screws 4000.250. Mark [2].

4000.250  
21.



**Screw**

3622.039  
22.



**Stator counter (cpt 6h and 9h and chrono)**

3402.012.CO  
23.



**Minute counting wheel**

3715.120.RK  
24.

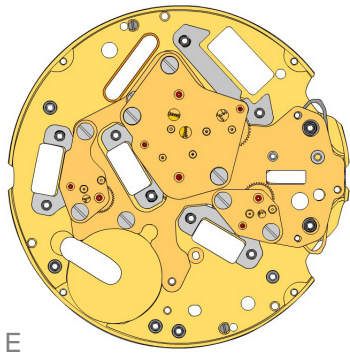


**Rotor**

3147.076.CO  
25.



**Intermediate wheel (counter 30min)**



2020.191.G  
26.



**Counter train wheel Bridge**  
Train wheel bridge held by 2 screws 4000.250. Mark [2].

4000.250  
27.



**Screw**

3622.039  
28.



**Stator counter**

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.

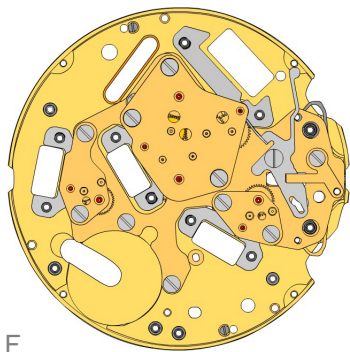


**Counter train wheel bridge**  
Train wheel bridge held by 2 screws 4000.250. Mark [2].

4000.250  
33.



**Screw**



3016.029  
34.



**Stop lever**  
Stop lever held by 1 screw 4000.249.

4000.249  
35.



**Screw**

2130.222  
36.



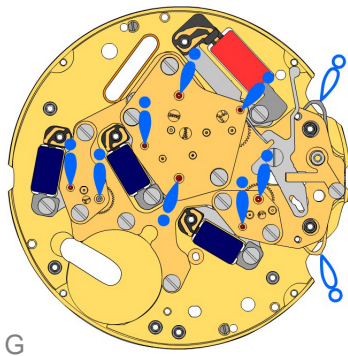
**Maintaining plate**  
Maintaining plate held by 1 screw 4000.248.


4000.248  
37.





**Screw**






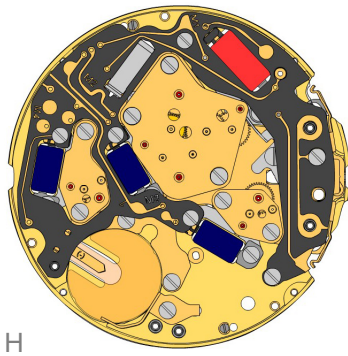
3621.072.RK  
38.  **Coil centre**  
Attention: Please hold the coil only on the grey coil core.

3621.055.RK  
39.  **Coil counter**  
Attention: Please hold the coil only on the grey coil core.


3621.055.RK  
40.  **Coil counter**  
Attention: Please hold the coil only on the grey coil core.


3621.055.RK  
41.  **Coil counter**  
Attention: Please hold the coil only on the grey coil core.


4000.250  
42.  **Screw**




3603.089  
43.  **Battery insulator**

3601.134  
44.  **Pusher contact spring**

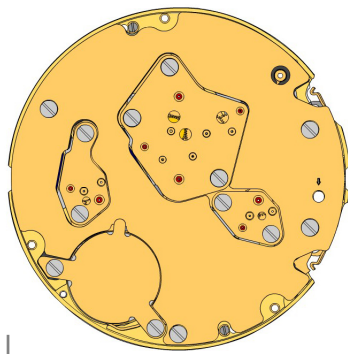
3612.218  
45.  **Electronic module**  
Electronic module held by 6 screws. (Electronic measurements may be realised now.)

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**




3603.090  
50.  **Circuit insulator**

2130.206.G.M01.8040N  
51.  **Electronic module cover**  
Electronic module cover held by 4 screws 4000.250.

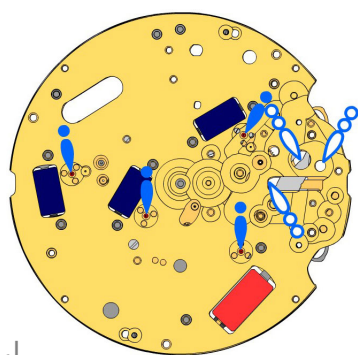
4000.250  
52.  **Screw**

3600.010.HGF  
53.  **Battery 395**

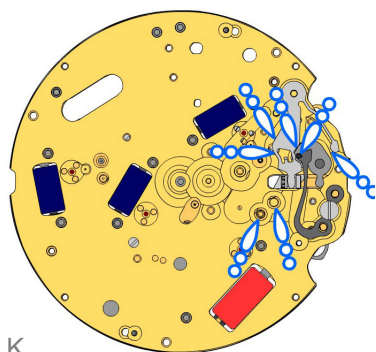
3601.133.G  
54.  **Bridle +**  
Bridle + held by 2 screws 4000.250.

4000.250  
55.  **Screw**

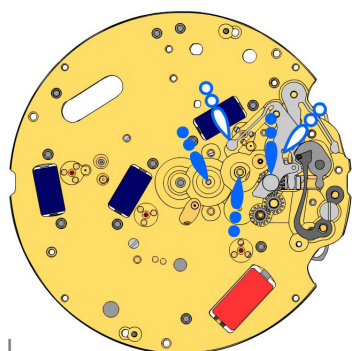




J



K



L

 2000.700.CO  
56. Main plate

 3017.054.CO  
57. Setting lever

 3001.046  
58. Sliding pinion

 3015.088  
59. Yoke (3 positions)

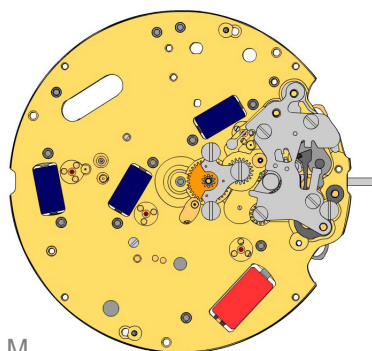
 3905.063  
60. Setting lever jumper  
Lever held by 1 screw 4000.282.

 4000.282  
61. Screw

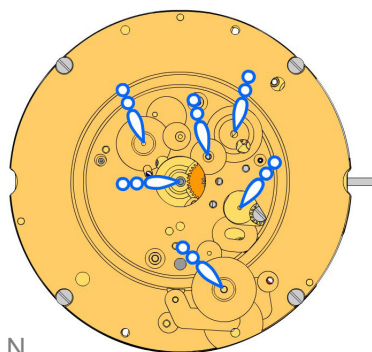
 3004.200  
62. Corrector setting wheel

 3004.200  
63. Corrector setting wheel

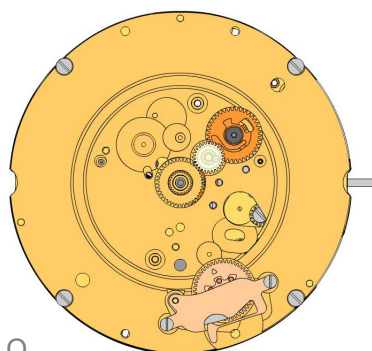
 3015.087.CO  
64. Setting wheel yoke



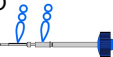













M

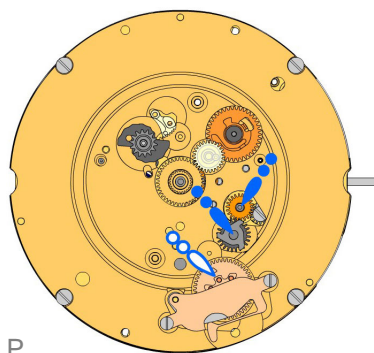


N

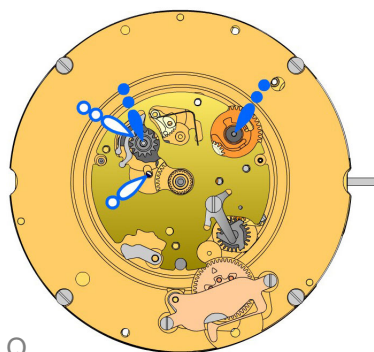


O






|                    |   |  |
|--------------------|---|--|
| 2130.208<br>65.    |    | <b>Setting mechanism cover</b><br>Setting meca cover held by 4 screws 4000.305.  |
| 4000.305<br>66.    |    | <b>Screw</b>   |
| 3000.203.CO<br>67. |    | <b>Setting stem</b>  |
| 3004.222<br>68.    |    | <b>Intermediate setting wheel</b>  |
| 3007.079.CO<br>69. |    | <b>Minute wheel</b>  |
| 2130.209<br>70.    |    | <b>Minute train bridge</b><br>Minute train bridge held by 3 screws 4000.278.   |
| 4000.278<br>71.    |    | <b>Screw</b>   |
| 2000.672.G<br>72.  |   | <b>Main plate retro</b><br>Minute plate retro held by 4 screws 4000.248.   |
| 4000.248<br>73.    |  | <b>Screw</b>   |
| 3004.220<br>74.    |  | <b>Tens indicator driving wheel</b><br>The short tooth of the tens indicator driving wheel must point to the center of the movement. |
| 3500.072<br>75.    |  | <b>Tens jumper</b>   |
| 2130.187<br>76.    |  | <b>Tens jumper maintaining plate</b><br>Tens jumper maintaining plate held by 2 screws 4000.279. Tensioning the spring arm.          |
| 4000.279<br>77.    |  | <b>Screw</b>   |
| 3301.292.CO<br>78. |  | <b>Hour wheel</b>  |
| 3004.208.CO<br>79. |  | <b>Date indicator driving wheel</b>  |
| 3147.061<br>80.    |  | <b>Intermediate date wheel</b>   |









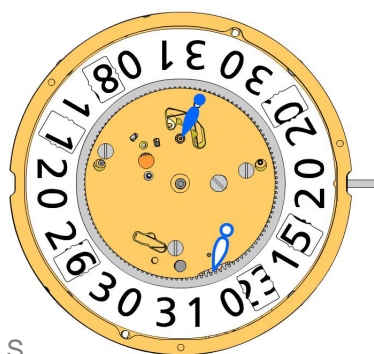
P





















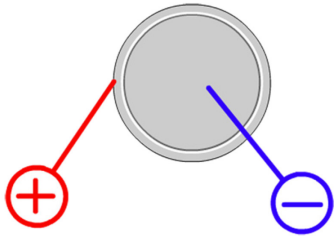
Q

|                    |   |   |
|--------------------|---|---|
| 3404.006.CO<br>81. |  | <b>Day cam</b><br>Place parts as shown on graphics. |
| 3406.032<br>82.    |  | <b>Day rack</b>                                     |
| 3406.031<br>83.    |  | <b>Day rack lever</b>                               |
| 3147.066.CO<br>84. |  | <b>Date corrector setting wheel</b>                 |
| 3507.059.CO<br>85. |  | <b>Date corrector wheel</b>                         |

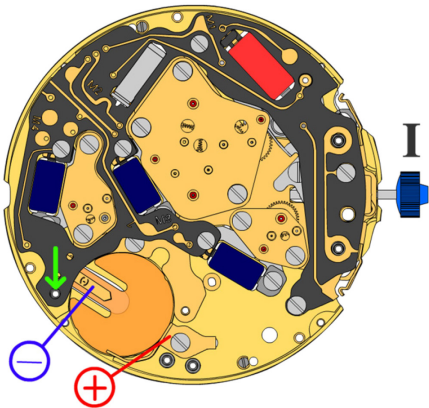
|                 |   |   |
|-----------------|---|---|
| 2130.191<br>86. |    | <b>Date indicator plate</b>   |
| 3905.068<br>87. |    | <b>Date corrector spring</b><br>Date corrector spring held by 1 screw 4000.244. |
| 4000.244<br>88. |   | <b>Screw</b>  |
| 3905.066<br>89. |  | <b>Day rack lever spring</b><br>Tensioning the spring arm.                      |
| 3500.068<br>90. |  | <b>Date jumper</b>  |
| 3500.069<br>91. |  | <b>Day jumper</b><br>Tensioning the spring arm.                                 |



|                         |   |   |
|-------------------------|---|---|
| 3504.234.AD.1.A<br>92.  |    | <b>Units indicator (standard)</b><br>Nick of the indicator at 3 o'clock.  |
| 2130.192<br>93.         |    | <b>Date indicator maintaining plate</b><br>Date indicator maintaining plate held by 1 screw.  |
| 4000.250<br>94.         |    | <b>Screw</b>  |
| 3905.064<br>95.         |    | <b>Date jumper spring</b><br>Insert the date jumper spring in the previous opening.   |
| 3004.244<br>96.         |    | <b>Day finger</b><br>Stem pos III: Turn crown forwards until the date jumps. Stem pos II: Move the date until the nick is at 3 o'clock. Position the end of the teeth against the day came pinion while turning softly in counterclockwise direction. |
| 3004.212<br>97.         |    | <b>Days driving wheel</b><br>Insert the tooth of the wheel in the flange gap, while turning softly in counterclockwise direction to ensure correct position of the day finger.  |
| 3401.086.FI<br>98.      |    | <b>Day indicator pinion</b>   |
| 3147.062<br>99.         |    | <b>Tens intermediate wheel</b><br>Place the arrow of the tens intermediate wheel in front of the half tooth of the tens indicator driving wheel.  |
| 3504.231.AD.1.A<br>100. |   | <b>Tens indicator (standard)</b><br>Nick of the indicator at 3 o'clock.   |
| 3315.003<br>101.        |  | <b>Friction spring</b>  |
| 2130.193.G<br>102.      |  | <b>Date mechanism maintaining plate</b><br>Date mechanism maintaining plate held by 3 screws 4000.320.  |
| 4000.320<br>103.        |  | <b>Screw</b>  |
| 3506.077.G<br>104.      |  | <b>Intermediate Dial support</b><br>Polished version first.   |
| 3506.076.G<br>105.      |  | <b>Dial support</b>   |
| 8200<br>106.            |  | <b>Moebius 8200</b>   |
| 9014<br>107.            |  | <b>Moebius 9014</b>   |
| 124<br>108.             |  | <b>Jismaa 124</b>   |
| 9020<br>109.            |  | <b>Moebius 9020</b>   |

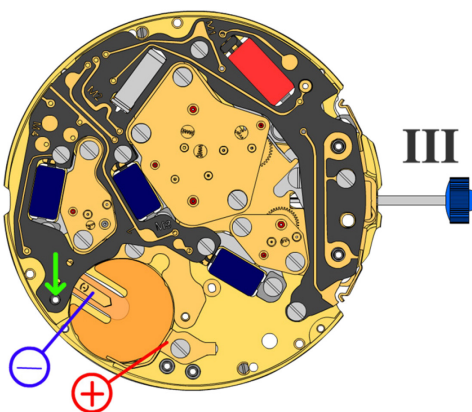


|         |               |
|---------|---------------|
| Battery | <b>395</b>    |
| Voltage | <b>1.55 V</b> |



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

|                             |                           |
|-----------------------------|---------------------------|
| Typical consumption         | <b><math>\mu A</math></b> |
| Maximal consumption         | <b><math>\mu A</math></b> |
| Instantaneous rate          | <b>-10s/M. .. +20s/M.</b> |
| Lower working voltage limit | <b>1.30 V</b>             |

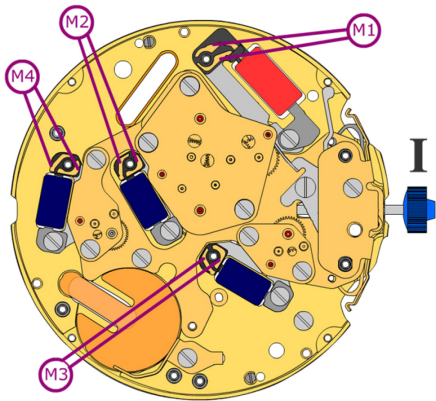


*Setting stem in position III, 60 s measuring interval:*

|                     |                                |
|---------------------|--------------------------------|
| Typical consumption | <b>0.10 <math>\mu A</math></b> |
| Maximal consumption | <b>0.30 <math>\mu A</math></b> |



*Hold down the electrical module to allow the electronic flow.*

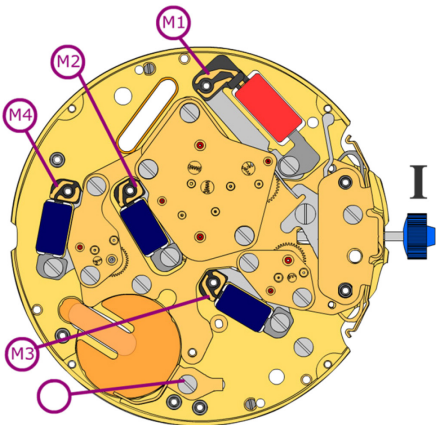


Coil resistance M1 **1.50 k $\Omega$  .. 1.70 k $\Omega$**

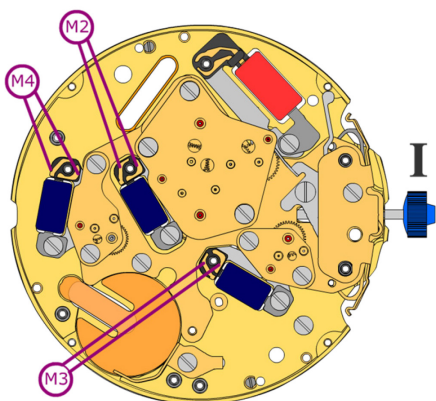
Coil resistance M2 **2.20 k $\Omega$  .. 2.40 k $\Omega$**

Coil resistance M3 **2.20 k $\Omega$  .. 2.40 k $\Omega$**

Coil resistance M4 **2.20 k $\Omega$  .. 2.40 k $\Omega$**



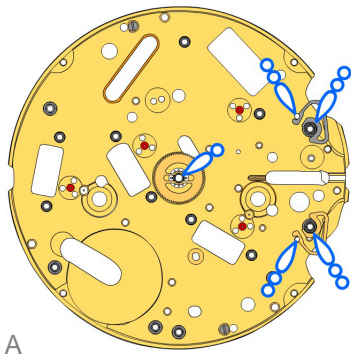
Coil isolation M1/M2/M3/M4  **$\infty$  k $\Omega$**







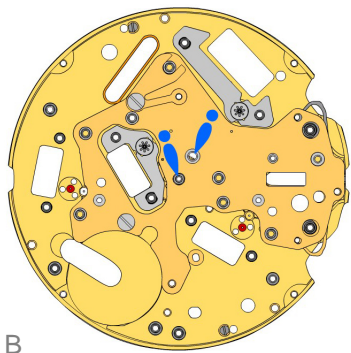
*Signal generator (4.9 ms, 8 Hz):*









Lower working voltage limit  
M2/M3/M4 **1.30 V**

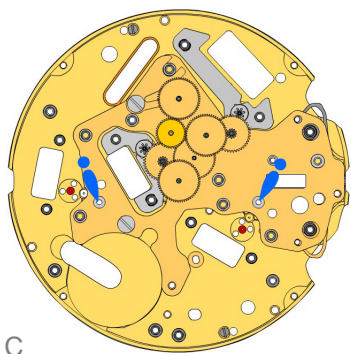











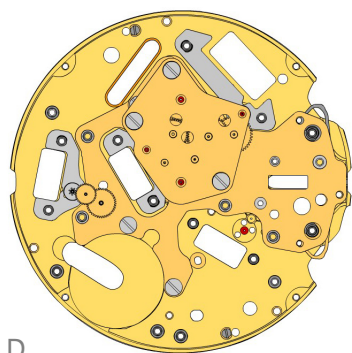
|                   |   |  |
|-------------------|---|--|
| 2000.700.CO<br>1. |  | Main plate   |
| 3406.038<br>2.    |  | Pusher jumper A<br>Put the yellow jumper between the two posts on the closer side. |
| 3406.030<br>3.    |  | Pusher jumper B<br>Put the grey jumper between the two posts on the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




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




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



D


2020.188.G  
20.  **Train wheel bridge**  
Train wheel bridge held by 2 screws 4000.250.

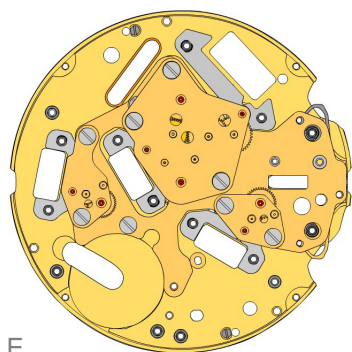
4000.250  
21.  **Screw**

3622.039  
22.  **Stator counter (cpt 6h and 9h and chrono)**


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


4000.250  
27.  **Screw**

3622.039  
28.  **Stator counter**

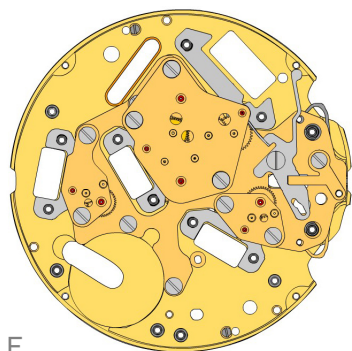
3402.013.CO  
29.  **Counting wheel (1/10 s)**

3715.120.RK  
30.  **Rotor**

3147.075.CO  
31.  **Intermediate wheel (counter 1/10 s)**

2020.190.G  
32.  **Counter train wheel bridge**  
Train wheel bridge held by 2 screws 40000.250. Mark [1].

4000.250  
33.  **Screw**



F

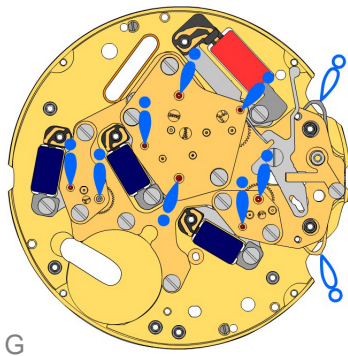
3016.029  
34.  **Stop lever**  
Stop lever held by 1 screw 4000.249.


4000.249  
35.  **Screw**


2130.222  
36.  **Maintaining plate**  
Maintaining plate held by 1 screw 4000.248.


4000.248  
37.  **Screw**






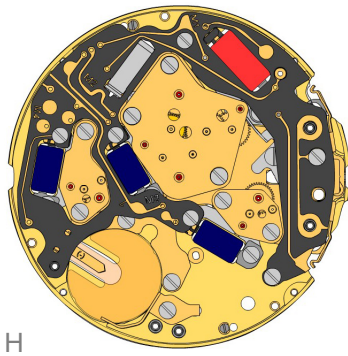
3621.072.RK  
38.  **Coil centre**  
Attention: Please hold the coil only on the grey coil core.

3621.055.RK  
39.  **Coil counter**  
Attention: Please hold the coil only on the grey coil core.


3621.055.RK  
40.  **Coil counter**  
Attention: Please hold the coil only on the grey coil core.


3621.055.RK  
41.  **Coil counter**  
Attention: Please hold the coil only on the grey coil core.


4000.250  
42.  **Screw**




3603.089  
43.  **Battery insulator**

3601.134  
44.  **Pusher contact spring**

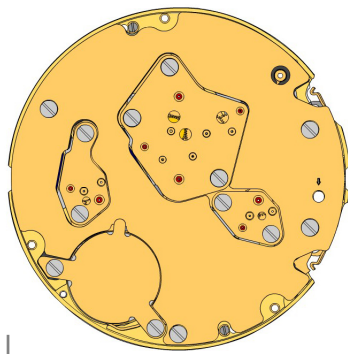
3612.218  
45.  **Electronic module**  
Electronic module held by 6 screws.

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**




3603.090  
50.  **Circuit insulator**

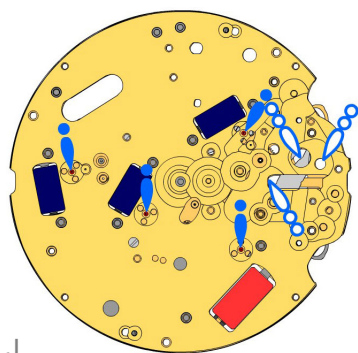
2130.206.G.M01.8040N  
51.  **Electronic module cover**  
Electronic module cover held by 4 screws 4000.250.

4000.250  
52.  **Screw**

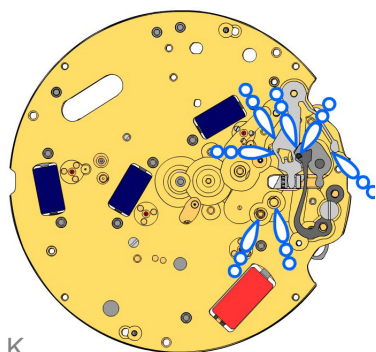
3600.010.HGF  
53.  **Battery 395**

3601.133.G  
54.  **Bridle +**  
Bridle + held by 2 screws 4000.250.

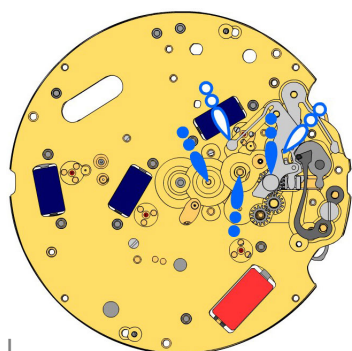
4000.250  
55.  **Screw**



J



K



L

 2000.700.CO  
56. Main plate

 3017.054.CO  
57. Setting lever

 3001.046  
58. Sliding pinion

 3015.088  
59. Yoke (3 positions)

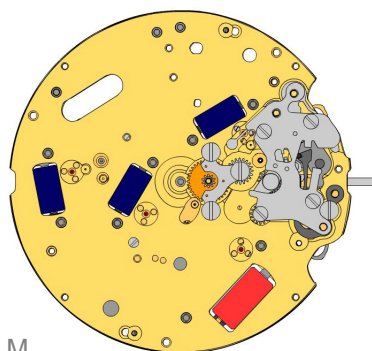
 3905.063  
60. Setting lever jumper  
Lever held by 1 screw 4000.282.

 4000.282  
61. Screw

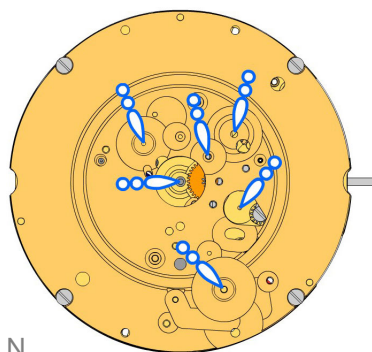
 3004.200  
62. Corrector setting wheel

 3004.200  
63. Corrector setting wheel

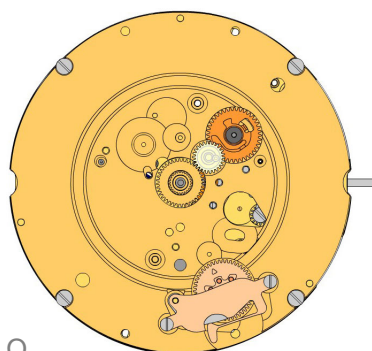
 3015.087.CO  
64. Setting wheel yoke



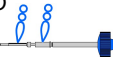













M

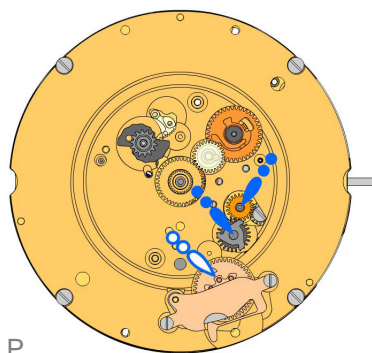


N



O

|                    |   |  |
|--------------------|---|--|
| 2130.208<br>65.    |    | <b>Setting mechanism cover</b><br>Setting meca cover held by 4 screws 4000.305.  |
| 4000.305<br>66.    |    | <b>Screw</b>   |
| 3000.203.CO<br>67. |    | <b>Setting stem</b>  |
| 3004.222<br>68.    |    | <b>Intermediate setting wheel</b>  |
| 3007.079.CO<br>69. |    | <b>Minute wheel</b>  |
| 2130.209<br>70.    |    | <b>Minute train bridge</b><br>Minute train bridge held by 3 screws 4000.278.   |
| 4000.278<br>71.    |    | <b>Screw</b>   |
| 2000.672.G<br>72.  |   | <b>Main plate retro</b><br>Minute plate retro held by 4 screws 4000.248.   |
| 4000.248<br>73.    |  | <b>Screw</b>   |
| 3004.220<br>74.    |  | <b>Tens indicator driving wheel</b><br>The short tooth of the tens indicator driving wheel must point to the center of the movement. |
| 3500.072<br>75.    |  | <b>Tens jumper</b>   |
| 2130.187<br>76.    |  | <b>Tens jumper maintaining plate</b><br>Tens jumper maintaining plate held by 2 screws 4000.279. Tensioning the spring arm.          |
| 4000.279<br>77.    |  | <b>Screw</b>   |
| 3301.292.CO<br>78. |  | <b>Hour wheel</b>  |
| 3004.208.CO<br>79. |  | <b>Date indicator driving wheel</b>  |
| 3147.061<br>80.    |  | <b>Intermediate date wheel</b>   |



P

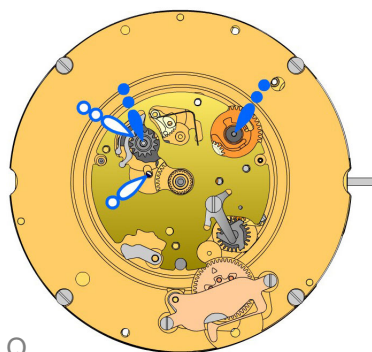
3404.006.CO  
81.  **Day cam**  
Place parts as shown on graphics.

3406.032  
82.  **Day rack**

3406.031  
83.  **Day rack lever**

3147.066.CO  
84.  **Date corrector setting wheel**

3507.059.CO  
85.  **Date corrector wheel**



Q

2130.191  
86.  **Date indicator plate**

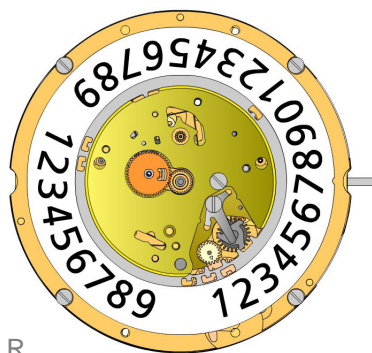
3905.068  
87.  **Date corrector spring**  
Date corrector spring held by 1 screw 4000.244.

4000.244  
88.  **Screw**

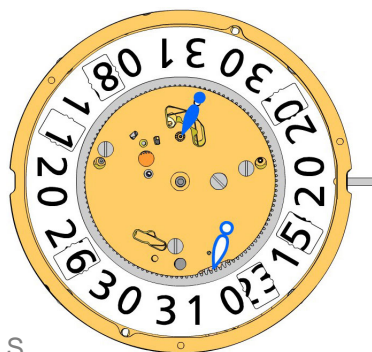
3905.066  
89.  **Day rack lever spring**  
Tensioning the spring arm.

3500.068  
90.  **Date jumper**




















3500.069  
91.  **Day jumper**  
Tensioning the spring arm.

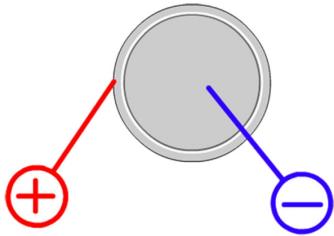


R

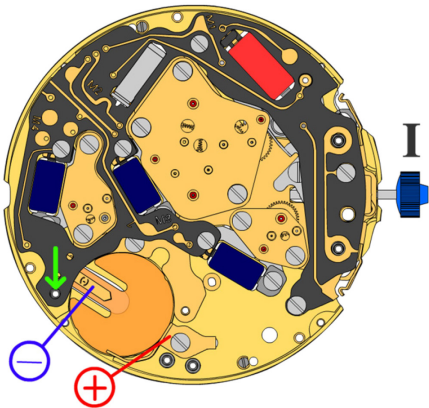


S

|                         |   |  |
|-------------------------|---|--|
| 3504.234.AD.1.A<br>92.  |    | <b>Units indicator (standard)</b><br>Nick of the indicator at 3 o'clock.   |
| 2130.192<br>93.         |    | <b>Date indicator maintaining plate</b><br>Date indicator maintaining plate held by 1 screw 4000.250.  |
| 4000.250<br>94.         |    | <b>Screw</b>   |
| 3905.064<br>95.         |    | <b>Date jumper spring</b><br>Insert the date jumper spring in the previous opening.  |
| 3907.047<br>96.         |    | <b>Day finger flange</b><br>Stem pos III: Turn crown forwards until the date jumps. Stem pos II: Move the date until the nick is at 3 o'clock.                                 |
| 3004.211<br>97.         |    | <b>Day finger</b><br>Position the end of the teeth against the day came pinion while turning softly in counterclockwise direction.   |
| 3004.212<br>98.         |    | <b>Days driving wheel</b><br>Insert the tooth of the wheel in the flange gap, while turning softly in counterclockwise direction to ensure correct position of the day finger. |
| 3401.086.FI<br>99.      |    | <b>Day indicator pinion</b>  |
| 3147.062<br>100.        |   | <b>Tens intermediate wheel</b><br>Place the arrow of the tens intermediate wheel in front of the half tooth of the tens indicator driving wheel.                               |
| 3504.231.AD.1.A<br>101. |  | <b>Tens indicator (standard)</b><br>Nick of the indicator at 3 o'clock.  |
| 3315.003<br>102.        |  | <b>Friction spring</b>   |
| 2130.193.G<br>103.      |  | <b>Date mechanism maintaining plate</b><br>Date mechanism maintaining plate held by 3 screws 4000.320.   |
| 4000.320<br>104.        |  | <b>Screw</b>   |
| 3506.077.G<br>105.      |  | <b>Intermediate Dial support</b><br>Polished version first.  |
| 3506.076.G<br>106.      |  | <b>Dial support</b>  |
| 8200<br>107.            |  | <b>Moebius 8200</b>  |
| 9014<br>108.            |  | <b>Moebius 9014</b>  |
| 124<br>109.             |  | <b>Jismaa 124</b>  |
| 9020<br>110.            |  | <b>Moebius 9020</b>  |

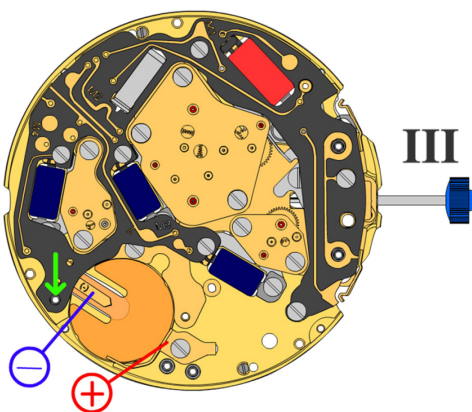


|         |               |
|---------|---------------|
| Battery | <b>395</b>    |
| Voltage | <b>1.55 V</b> |



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

|                             |                           |
|-----------------------------|---------------------------|
| Typical consumption         | <b><math>\mu A</math></b> |
| Maximal consumption         | <b><math>\mu A</math></b> |
| Instantaneous rate          | <b>-10s/M. .. +20s/M.</b> |
| Lower working voltage limit | <b>1.30 V</b>             |



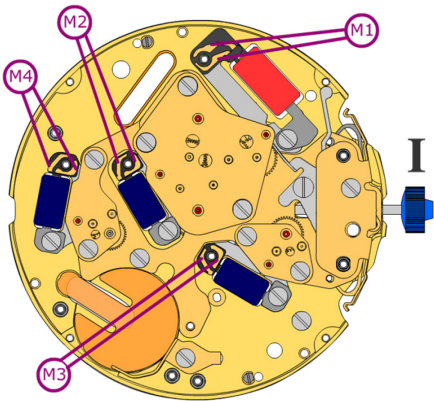
*Setting stem in position III, 60 s measuring interval:*

|                     |                                |
|---------------------|--------------------------------|
| Typical consumption | <b>0.10 <math>\mu A</math></b> |
| Maximal consumption | <b>0.30 <math>\mu A</math></b> |



*Hold down the electrical module to allow the electronic flow.*



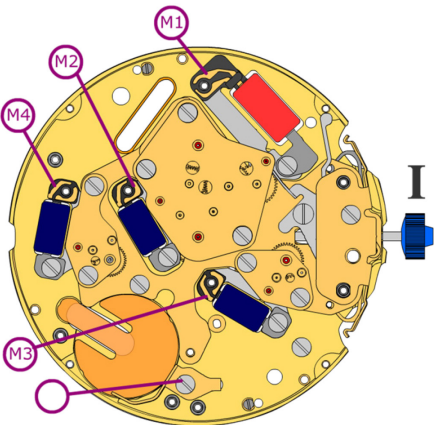


Coil resistance M1 **1.50 k $\Omega$  .. 1.70 k $\Omega$**

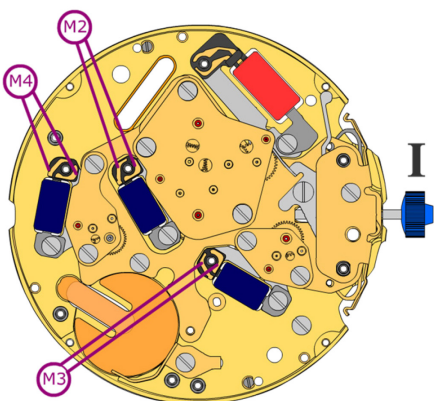
Coil resistance M2 **2.20 k $\Omega$  .. 2.40 k $\Omega$**

Coil resistance M3 **2.20 k $\Omega$  .. 2.40 k $\Omega$**

Coil resistance M4 **2.20 k $\Omega$  .. 2.40 k $\Omega$**



Coil isolation M1/M2/M3/M4  **$\infty$  k $\Omega$**



*Signal generator (4.9 ms, 8 Hz):*

Lower working voltage limit  
M2/M3/M4 **1.30 V**