

## Caliber 6004.D – 11½"



### Product Specifications

Analog quartz movement

Line normtech

Caliber 6004.D

Size 11½"

Version Swiss Made 5 Jewels / gold plated EOL

Standard battery life 40 months

Standard hand fitting height 1

### Features

- Repairable metal watch movement
- Power saving mechanism with pulled out stem:  
Reduction of consumption approximately 70%

### Functions

- Small second
- Date
- 2 hands

## Quartz Movements

### Classic Functions

#### RONDA normtech

## Caliber 6004.D – 11½"

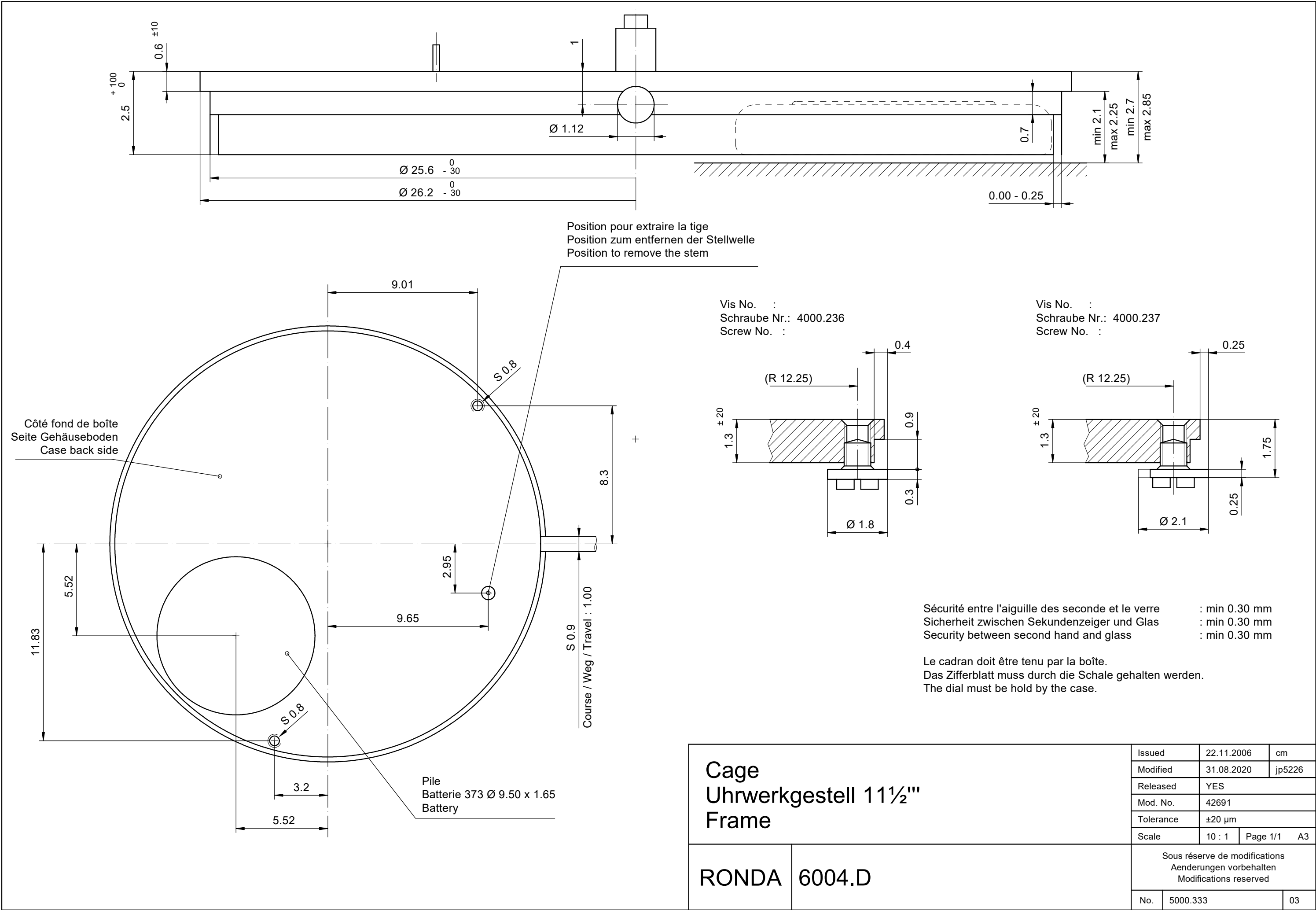
### Technical Specifications

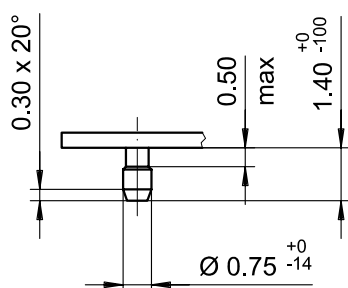
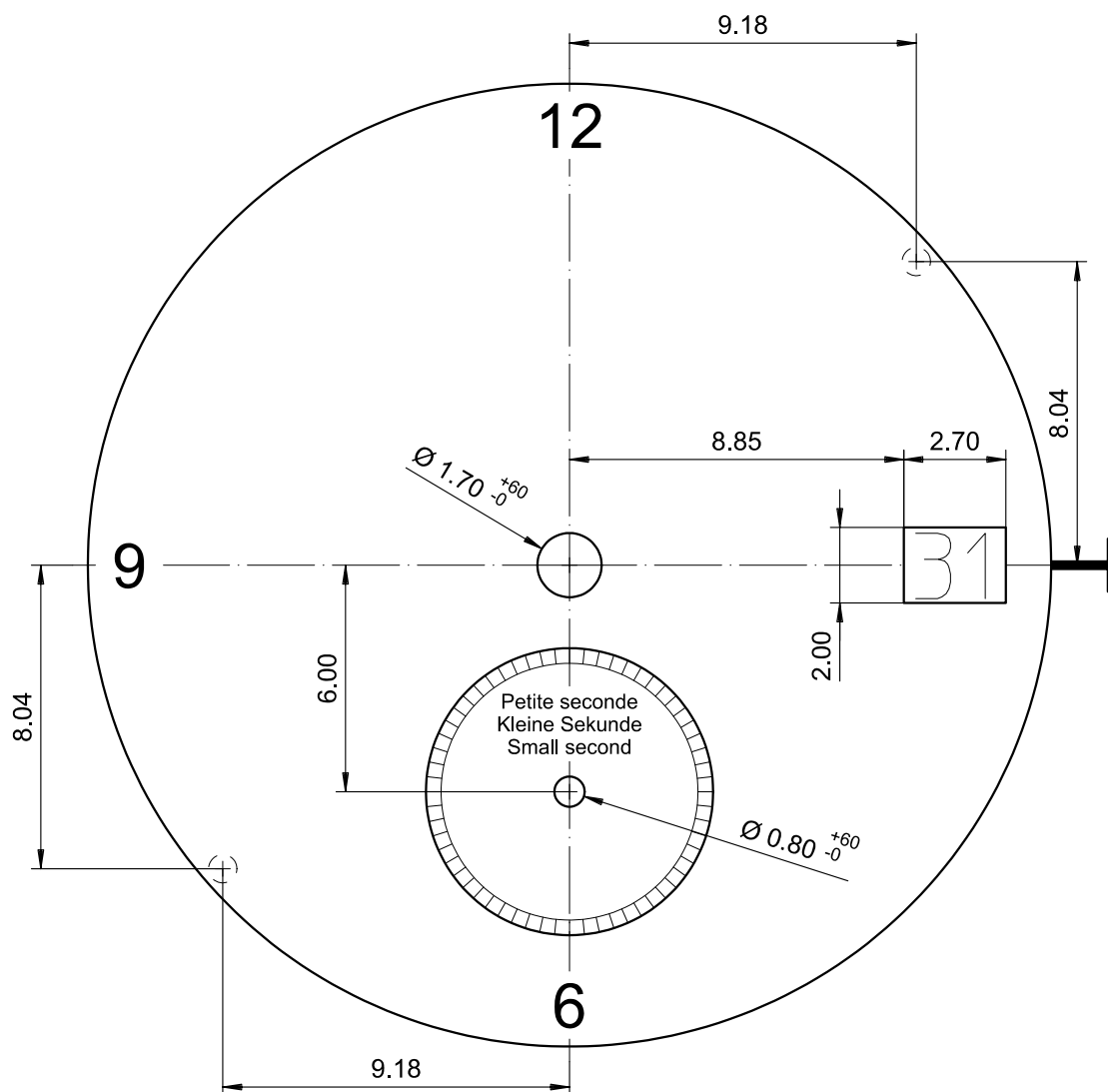
Diameter Total	26.00 mm
Case fitting	25.60 mm
Movement height	2.50 mm
Height over standard battery	2.50 mm
Movement rest	0.60 mm
Height over stem	1.00 mm
Length of stem travel	1.00 mm
Stem thread	0.90 mm
Useful torque second – typical	6 µNm
Useful torque minute – typical	300 µNm
Operating temperature	0 - 50 °C
Instantaneous rate	-10/ +20 sec/month
Resistance to magnetic fields	18.8 Oe
Resistance against shock	NIHS 91-10



### Battery Specifications

Standard battery	No. 373
Standard battery life	40 months
Battery voltage	1.5 V
Current consumption – typical	1.03 µA (Date Mechanism not in Gear)
Current consumption – maximum	1.45 µA (Date Mechanism not in Gear)



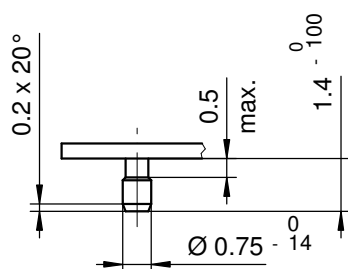
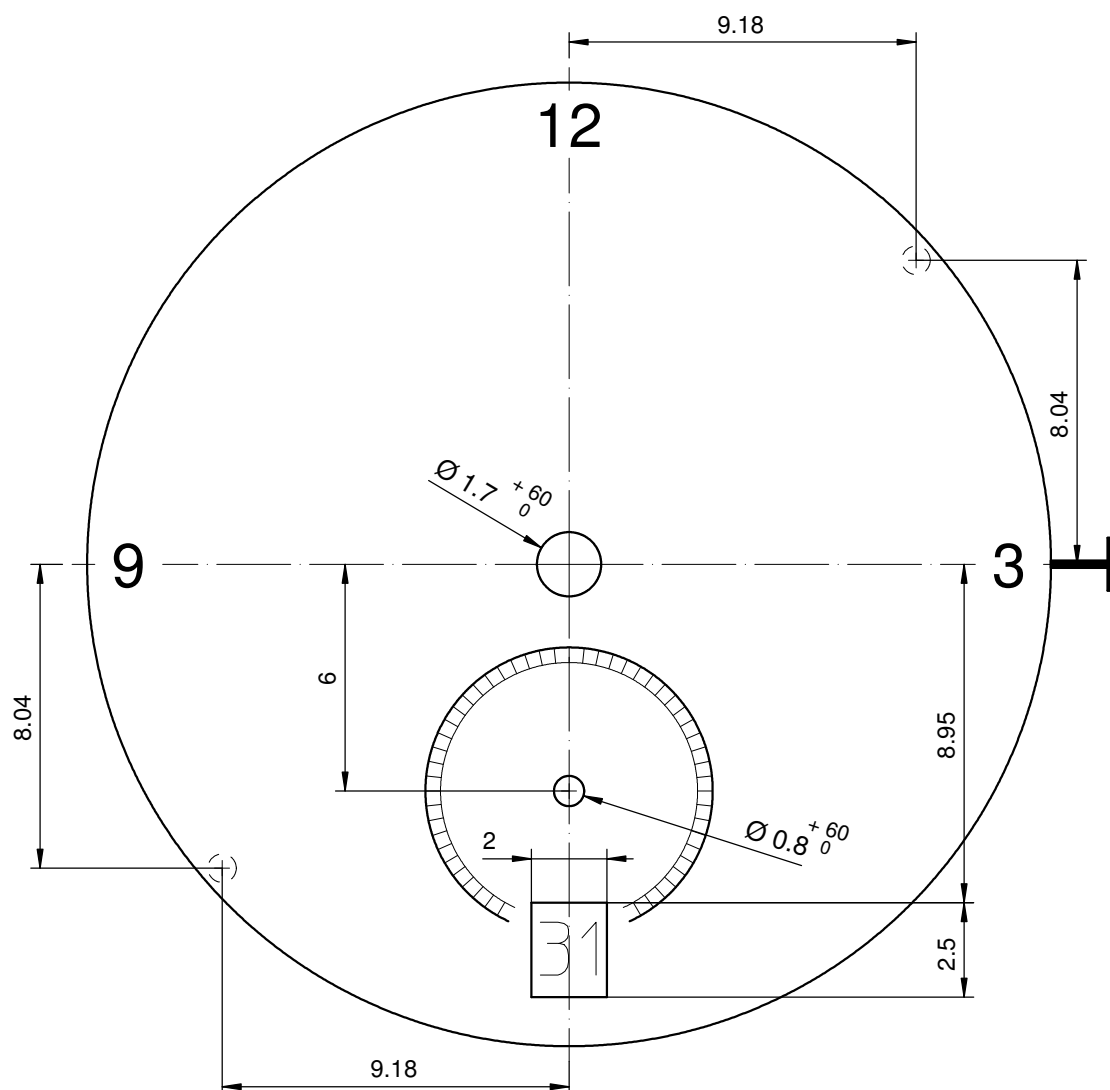


Tige	Date
Stellw.	Datum
Stem	Date
3H	3H

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

Cadran Zifferblatt Dial		11½"		Issued	23 Nov 2006	cm
				Modified	21.Apr.2008 ÄA 4553	fl
				Released	YES	
				Tolerance	+/- 20 µm	
				Scale	5 : 1 (A4V)	
RONDA	6004.D	Sous réserve de modifications Änderungen vorbehalten Modifications reserved				
		No.	5010.762	01		

11 1/2"



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

11½"

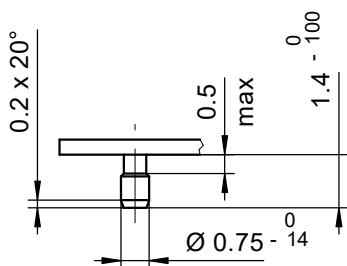
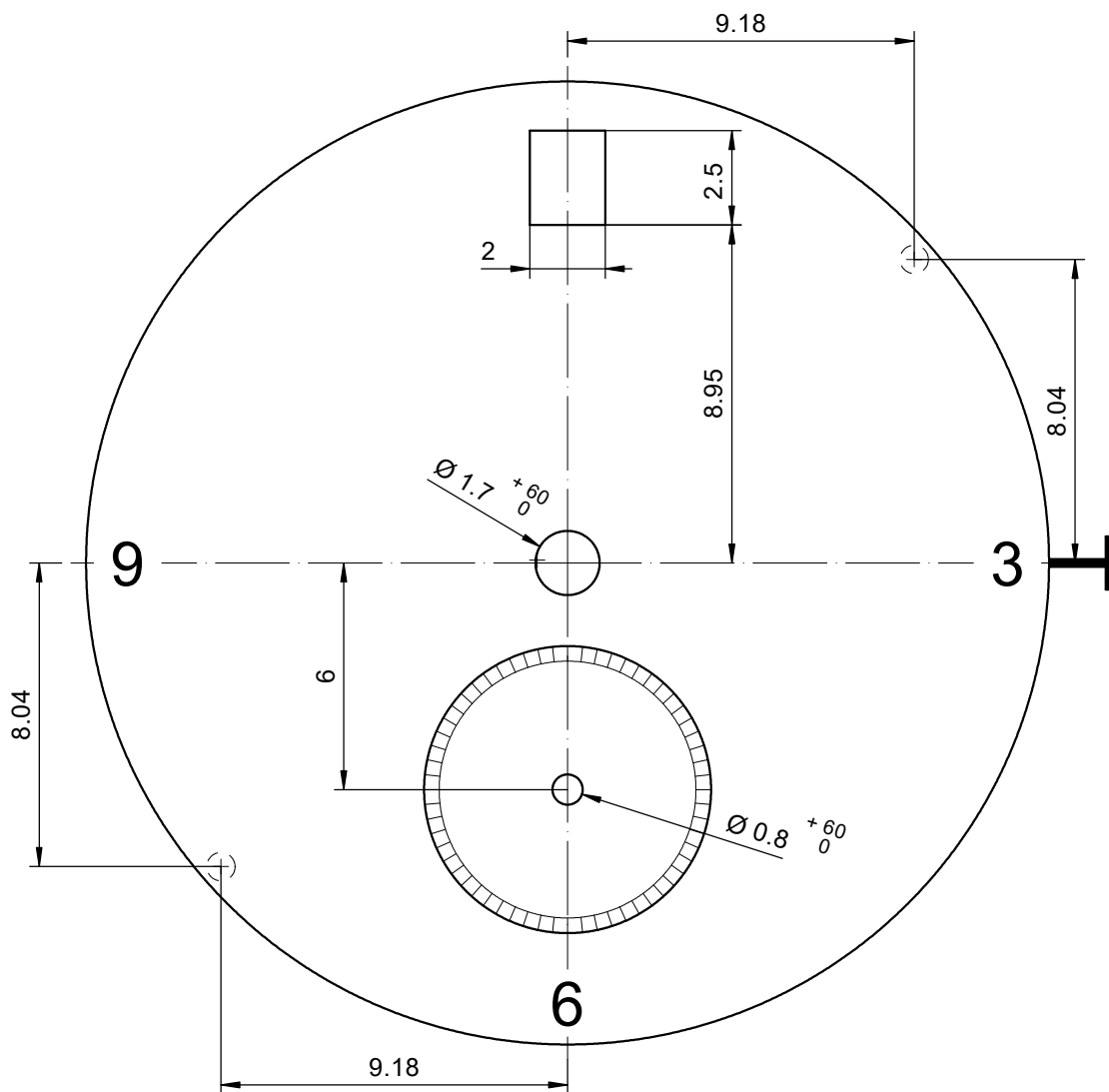
Issued	23 Nov 2006	cm
Modified	13 Mär 2012 ÄÄ 11870	ds
Released	YES	
Tolerance	+/- 20 µm	
Scale	5 : 1 (A4V)	

Sous réserve de modifications  
Änderungsvorbehalten  
Modifications reserved

No.	5010.763	01
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RONDA

6004.D



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

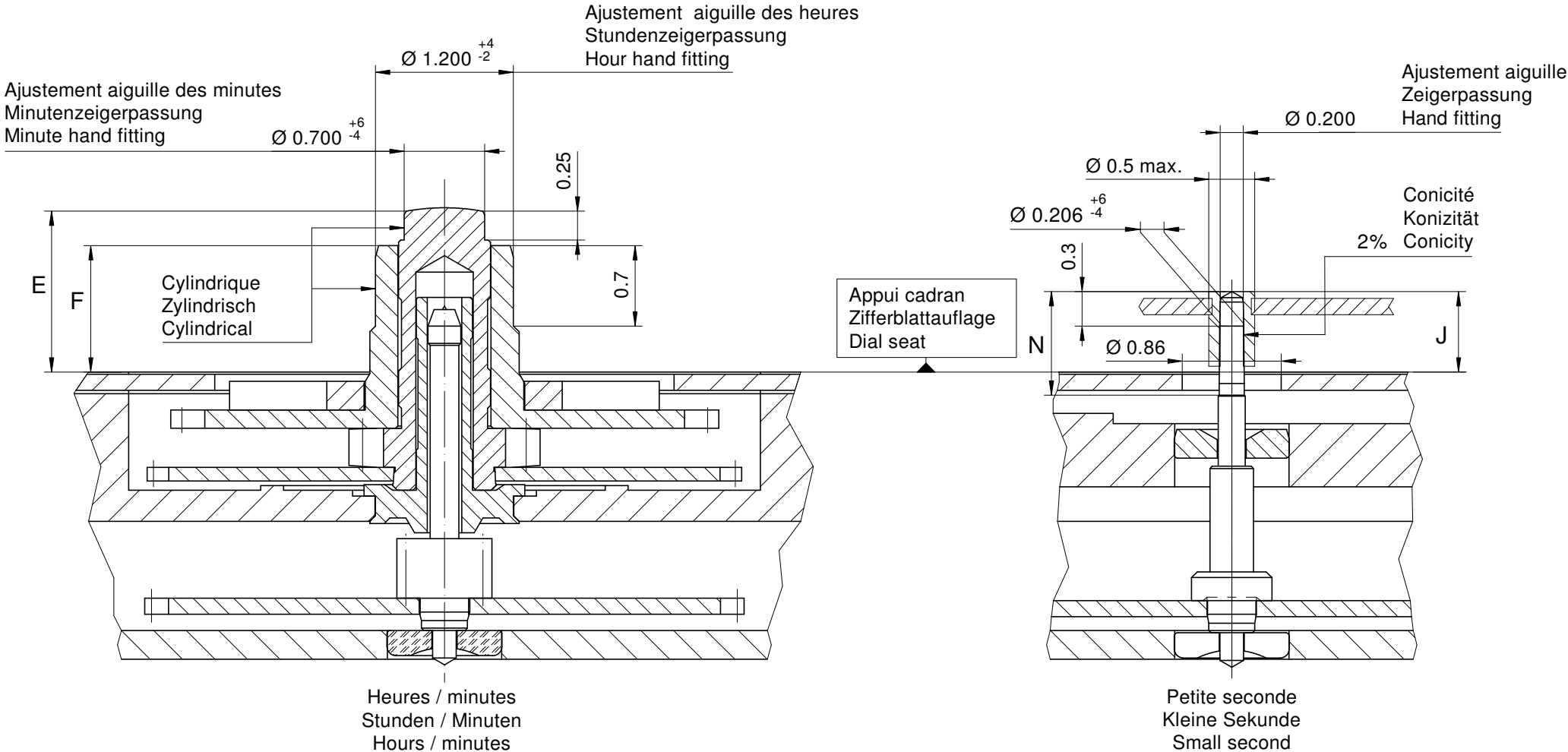
Cadran  
Zifferblatt 11 1/2"  
Dial

Issued	23.11.2006	cm
Modified	24.06.2021	dh5221
Released	YES	
Mod. No.	44083	
Tolerance	±20 µm	
Scale	10 : 1	Page 1/1 A4

RONDA 6004.D

Sous réserve de modifications  
Änderungen vorbehalten  
Modifications reserved

No.	5010.764	00
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Aiguillages Zeigerwerkhöhe Hand fitting height				
Dépassement Höhe über Zifferblattaufgabe Height over dial seat				
No	Chaussée Minutenrohr Cannon-pinion	Roue des heures Stundenrad Hour wheel	Petite seconde Kleine Sekunde Small second	
	E	F	J	N
1	1.40	1.10	0.70	0.90
-				

Aiguillages Zeigerwerkhöhe Hand fitting height					
Peinture comprise / inkl. Farbe / Paint included					
No	Epaisseur maximum du cadran Maximale Zifferblattdicke Maximum dial thickness				Epaisseur des aiguilles Zeigerdicke Hands thickness
	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		
1	1.00	0.70	0.25		0.15
-					

		Aig. des minutes Minutenzeiger Minute hand	Aig. des heures Stundenzeiger Hour hand	Aig. petite secondes Kleine Sekundenzeiger Small second 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.	30	30	10	Masse / Masse / Weight *
µNm	max.	0.80	0.80	0.05	Balourd / Unwucht / Unbalance *
gmm <sup>2</sup>	max.	-	-	0.4	Inertie / Massenträgheit / Inertia *
N	max.	40	40	30	Force de chassage / Aufpresskraft / Force

Aiguillages Zeigerwerkhöhen 1 1½" Hand fitting heights		Issued	14 Nov 2006	cm
		Modified	15 Okt 2014 ÄA 13275	dh
		Released	Yes	
		Tolerance	µm	
		Scale	20 : 1 (A3H)	
RONDA	6004.D	Sous réserve de modifications Änderungen vorbehalten Modifications reserved		
		No.	3316.102	08

\* 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)  
Arbeitsstellwelle (im Werk eingebaut)  
Working stem (implemented in the movement)

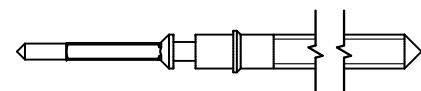
No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.189.CO	19.30	10.57	23.37	10.15	0.90	1.10



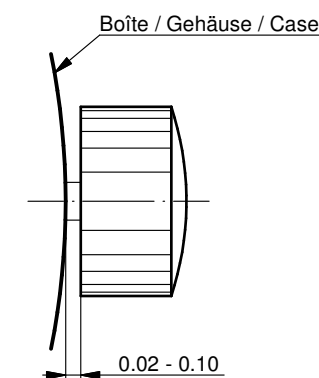
Couleur de la couronne Kronenfarbe Crown color	marron kastanienbraun chestnut
Code	UN 8018

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

No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.189	19.30	10.57	23.37	10.15	0.90	1.10
3000.199	25.00	16.27	29.07	15.85	0.90	1.10



Couronne normale  
Normale Krone  
Normal crown

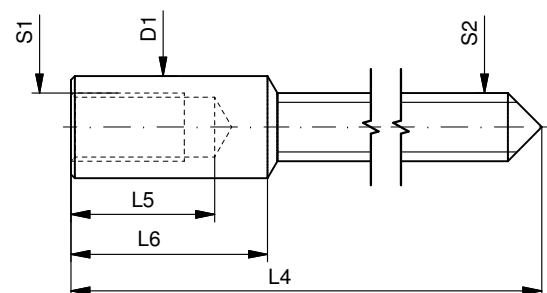


Couronne vissée  
Geschraubte Krone  
Screwed crown

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

Rallonge de tige / Stellwelle Verlängerung / Stem extension

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



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

RONDA

6003.B, 6003.D, 6004.B,  
6004.D

Issued	06 Sep 2012	ds5222
Modified	17 Mär 2017 ÄA 34582	mg5224
Released	YES	
Tolerance	---	
Scale	10:1 (A3)	
Sous réserve de modifications Äenderungen vorbehalten Modifications reserved		
No.	5030.021	01





**Movement holder**  
*Removing setting stem*  
H6XXX.1T



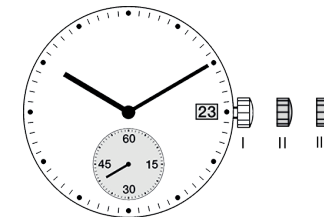
**Movement holder**  
*Setting hands*  
H6XXX.1A2

## Fitting dial and hands

- Crown in position III
- Wind hour hand forwards, until date changes
- Remove working hand
- Set friction spring 3315.001 on the hour wheel, if not yet in place
- Fit dial
- Point all hands towards 12 o'clock
- Set time
- Crown in position II
- Set date
- Crown in position I

**Date switching duration:**

~1¼hrs



## 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 hand: <30N*

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

User's Manual English  
Movements Caliber

RONDA powertech

- 585
- 505
- 515

RONDA slimtech

- 1005
- 1006
- 1009
- 1015
- 1016
- 1019

RONDA normtech

- 774 - 6003.D
- 775 - 6004.D
- 704
- 705
- 784
- 785
- 714
- 715
- 715Li

RONDA xtratech

- 6003.B
- 6004.B
- 7002.B
- 7003.B
- 7004.B

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.

Cal. 585 / 785:  
Battery type: 362/SR721SW

Cal. 774 / 775 / 784:  
Battery type: 364/SR621SW

Cal. 505 / 515 / 704 / 705 / 714 / 715:  
Battery type: 371/SR920SW

Cal. 6003.D / 6004.D / 6003.B / 6004.B:  
Battery type: 373/SR916SW

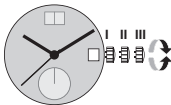
Cal. 1005 / 1006 / 1009 / 1015 / 1016 / 1019:  
Battery type: 341/SR714SW

Cal. 7002.B / 7003.B / 7004.B:  
Battery type: 381/SR1120SW

Cal. 715Li:  
Battery type: CR 2016

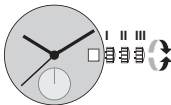
Precision: +20/-10 seconds per month

Cal. 585	Cal. 6003.D
Cal. 505	Cal. 6004.D
Cal. 515	Cal. 6003.B
	Cal. 6004.B



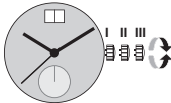
- Pos. I Position of rest (watch running)**
- Pos. II Quick-change correction for date**  
*The date can also be corrected during the day-changing phase between 10 pm and midnight. The date of the following day has to be set, because no automatic date change takes place at midnight.*
- Pull the crown out to position II (watch still running).
  - Turn the crown clockwise until the required date appears.
  - Cal. 6003.D & 6004.D:*
  - Turn the crown until the required date appears.
  - Push the crown back into position I.
- Pos. III Setting the time**
- Pull the crown out to position III (watch stopped).
  - Turn the crown, until the current time is displayed (remember the 24-hour cycle).
  - Push the crown back into position I.

Cal. 774	Cal. 715Li
Cal. 775	
Cal. 704	Cal. 1005
Cal. 705	Cal. 1006
Cal. 784	Cal. 1009
Cal. 785	Cal. 1015
Cal. 714	Cal. 1016
Cal. 715	Cal. 1019

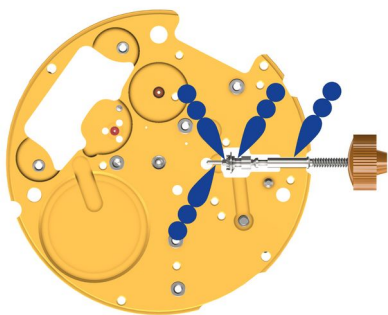






- Pos. I Position of rest (watch running)**
- Pos. II Quick-change correction for date**  
*Blocking time for the quick-change day correction is from approx. 9.30 pm and midnight.*
- Pull the crown out to position II (watch still running).
  - Turn the crown until the current date appears.
  - Push the crown back into position I.
- Pos. III Setting the time**
- Pull the crown out to position III (watch stopped).
  - Turn the crown, until the current time is displayed (remember the 24-hour cycle).
  - Push the crown back into position I.

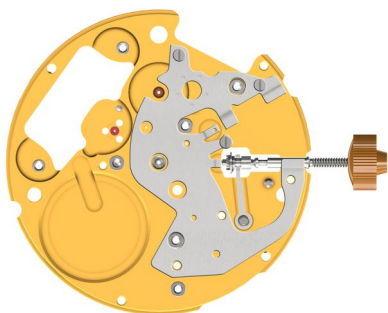
Cal. 7002.B
Cal. 7003.B
Cal. 7004.B








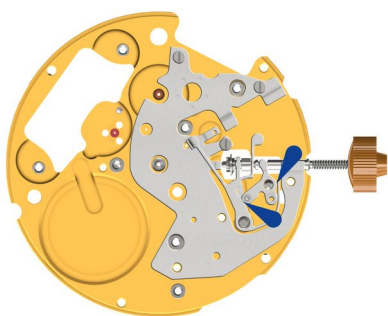
- Pos. I Position of rest (watch running)**
- Pos. II Quick-change correction for date**  
*The date can also be changed during the day-changing phase between approx. 8.00 pm and midnight. The date of the following day has to be set, because no automatic date change takes place at midnight.*
- Pull the crown out to position II (watch still running).
  - Turn the crown until the current date appears.
  - Push the crown back into position I.
- Pos. III Setting the time**
- Pull the crown out to position III (watch stopped).
  - Turn the crown, until the current time is displayed (remember the 24-hour cycle).
  - Push the crown back into position I.






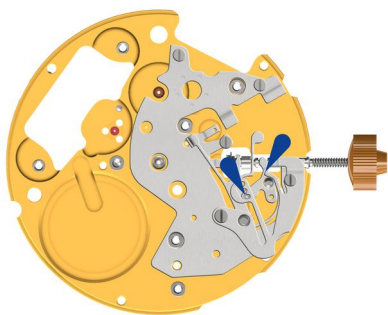
- |   |   |             |                  |
|---|---|-------------|------------------|
| 1 |  | 2000.675.G  | Main plate       |
| 2 |  | 3000.189.CO | Working stem     |
| 3 |  | 3001.056.FI | Sliding pinion D |
| 4 |  | 9020        | Moebius 9020     |





- |   |   |          |                         |
|---|---|----------|-------------------------|
| 5 |    | 2130.252 | Setting mechanism cover |
| 6 |    | 4000.321 | Screw                   |
| 7 |  | 4000.321 | Screw                   |
| 8 |  | 4000.321 | Screw                   |
| 9 |  | 3015.083 | Bottom yoke             |





- |    |   |             |               |
|----|---|-------------|---------------|
| 10 |  | 3017.056.CO | Setting lever |
| 11 |  | 3015.082    | Yoke          |
| 12 |  | 8200        | Moebius 8200  |

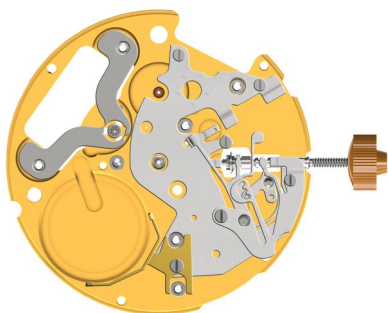



13  3905.069 Setting lever jumper  
Tensioning the spring arm.


14  4000.312 Screw


15  4000.328 Screw


16  8200 Moebius 8200

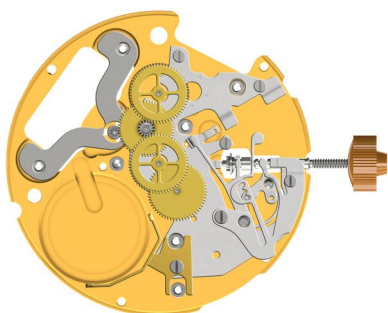


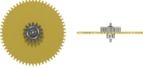
17  3601.117.G Battery clamp (+)


18  4000.244 Screw

19  3622.042 Stator

20  3715.103.RK Rotor

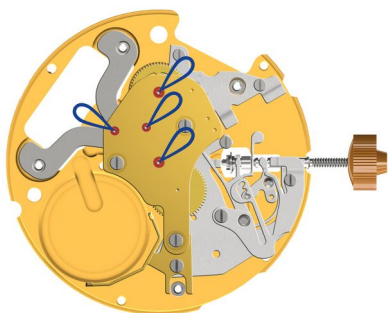







21  3147.056.CO Intermediate wheel

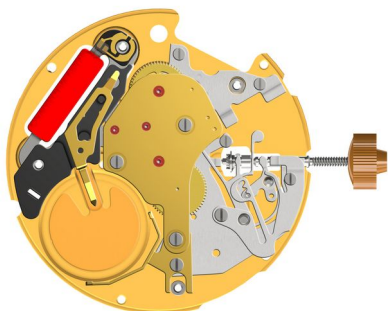
22  3122.059.CO Third wheel





23  3136.168.CO Small second wheel (Aig.)

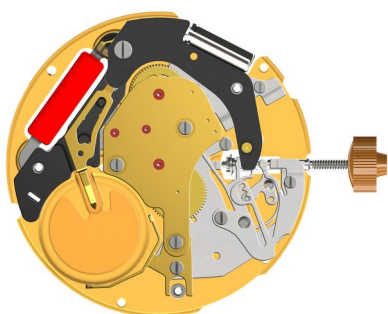
24  3136.163.CO Center second wheel short (Aig.)





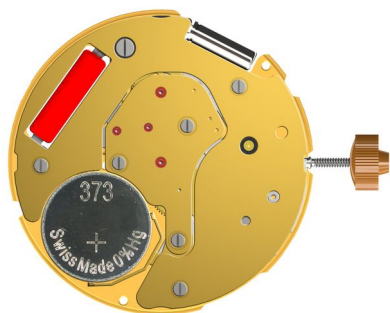
25		2020.180.G	Train wheel bridge
26		4000.279	Screw
27		4000.279	Screw
28		4000.279	Screw
29		9014	Moebius 9014








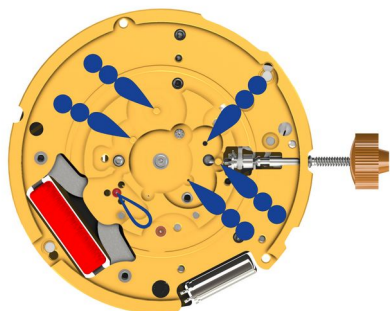
30		3621.060.RK	Coil Attention: Please hold the coil only on the grey coil core.
31		3603.075	Battery insulator
32		3603.074	Bridle (-) insulator
33		3601.116	Bridle -




34		3612.270.RK	Electronic module
35		4000.318	Screw




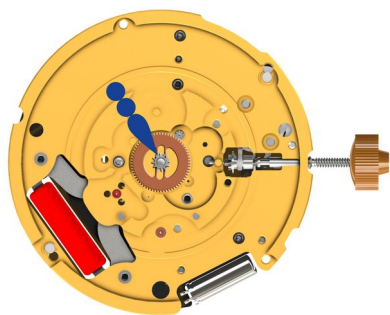
- |    |   |                      |                             |
|----|---|----------------------|-----------------------------|
| 36 |  | 2130.168.G.M01.6004D | Electronic module cover     |
| 37 |  | 4000.102             | Screw                       |
| 38 |  | 4000.102             | Screw                       |
| 39 |  | 4000.102             | Screw                       |
| 40 |  | 3600.031.HGF         | Battery 373 (Ø 9.45 x 1.65) |




- |    |   |             |  |
|----|---|-------------|--|
| 41 |  | 9014 / 9020 | Moebius 9014 / Moebius 9020<br>1x Moebius 9014 / 5x Moebius 9020 |
|----|---|-------------|--|

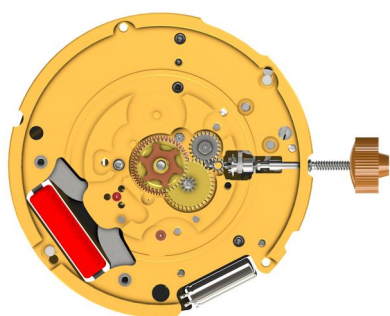




- |    |   |      |              |
|----|---|------|--------------|
| 42 |  | 9020 | Moebius 9020 |
|----|---|------|--------------|





43   3305.345.CO Cannon pinion (Aig.)



44  9020 Moebius 9020

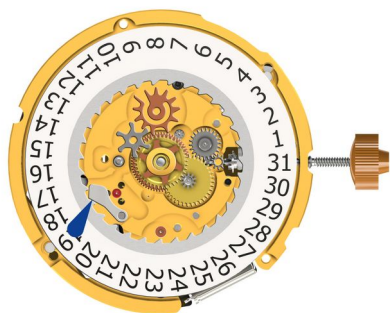



45   3004.253.FI Setting wheel

46   3004.252.FI Intermediate setting wheel

47   3007.087.CO Minute wheel


48   3301.335.CO Hour wheel (Aig.)





49  3315.001 Friction spring

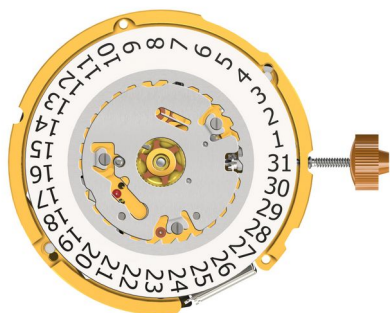
50  3147.084 Date intermediate setting wheel






51  3004.235 Date indicator driving wheel D

52  3504.239.AA.1.A Date indicator (T3, G3)  
Nick of the indicator at 3 o'clock.

53  3500.077 Date jumper

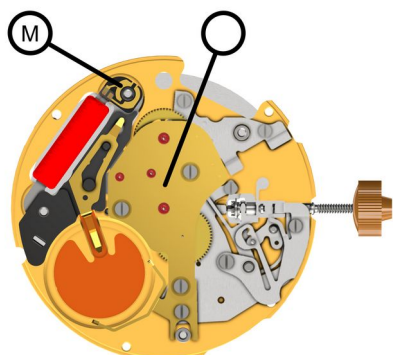
54  8200 Moebius 8200



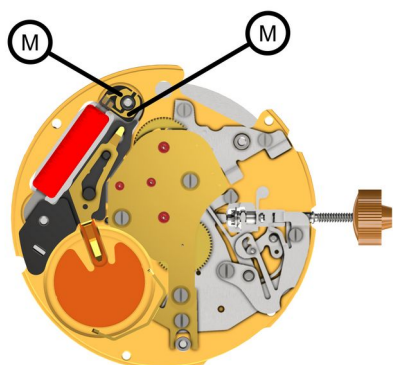
55		3905.103	Date jumper spring
56		2130.217	Date indicator maintaining plate
57		4000.300	Screw
58		4000.300	Screw
59		4000.300	Screw



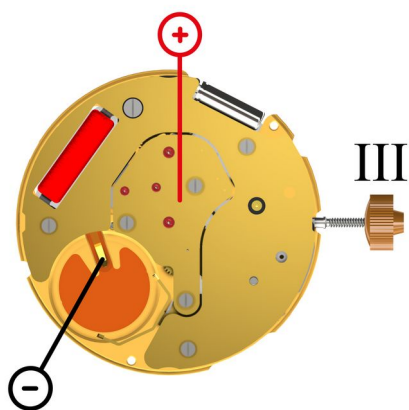
## Measurement



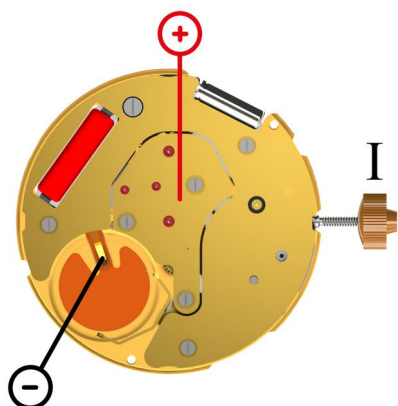
Coil insulation M  
infinite



Coil condition movement  
(min./max.) 1610 - 1810 Ohm



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



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

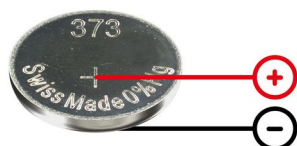
(typ./max.) 1.03 / 1.85  $\mu$ A

60s measuring interval

-10 .. +20s/mth

Lower working voltage limit

<1.20 V



Battery tension

typ 1.5V