

# RONDA normtech 700 & 6000

Long battery-life and special functionality

*Caliber 6004.B – 11½'''*



## Product Specifications

Analogue quartz movement	
Line	normtech
Caliber	6004.B
Size	11½'''
Version	Swiss Made Swiss Parts
	5 Jewels / gold plated 1 Jewels / nickel plated
Standard battery life	40 months
Hand fitting height	1

## Features

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

**Functions**

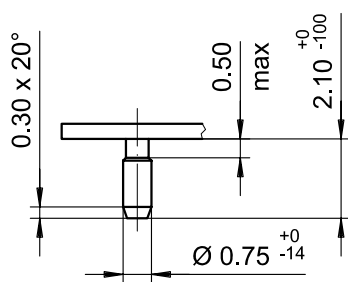
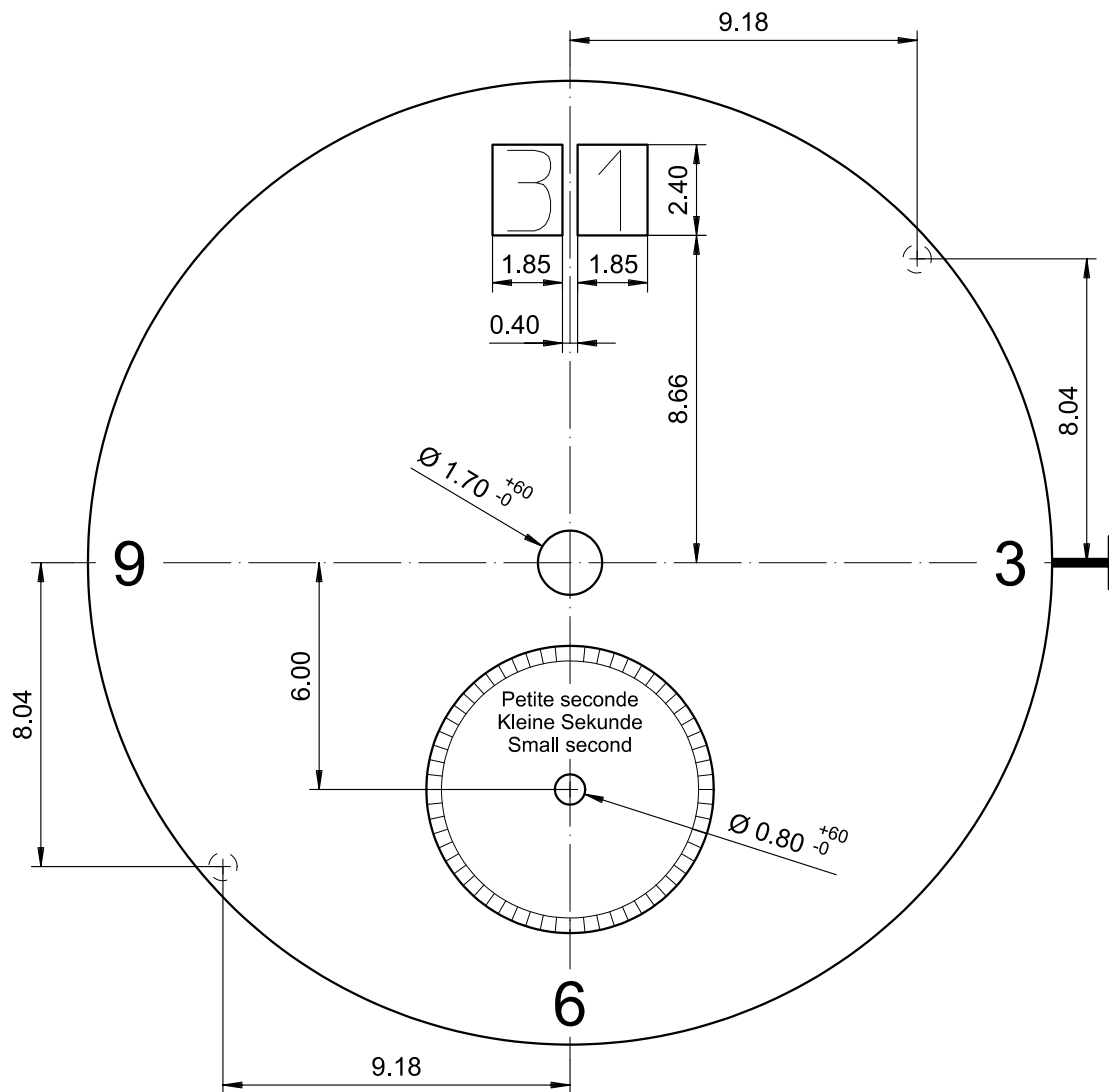
- Big date
- Small second
- 2 hands

**Technical Specifications**

Diameter Total	26.00 mm
Case fitting	25.60 mm
Movement height	3.30 mm
Height over standard battery	3.30 mm
Movement rest	0.60 mm
Height over stem	1.80 mm
Length of stem travel	0.90 mm
Force to push the stem for screwed crown	10 / 17,5 N
Stem thread	0.90 mm
Standard battery	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	1.85 µA (Date Mechanism not in Gear)
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



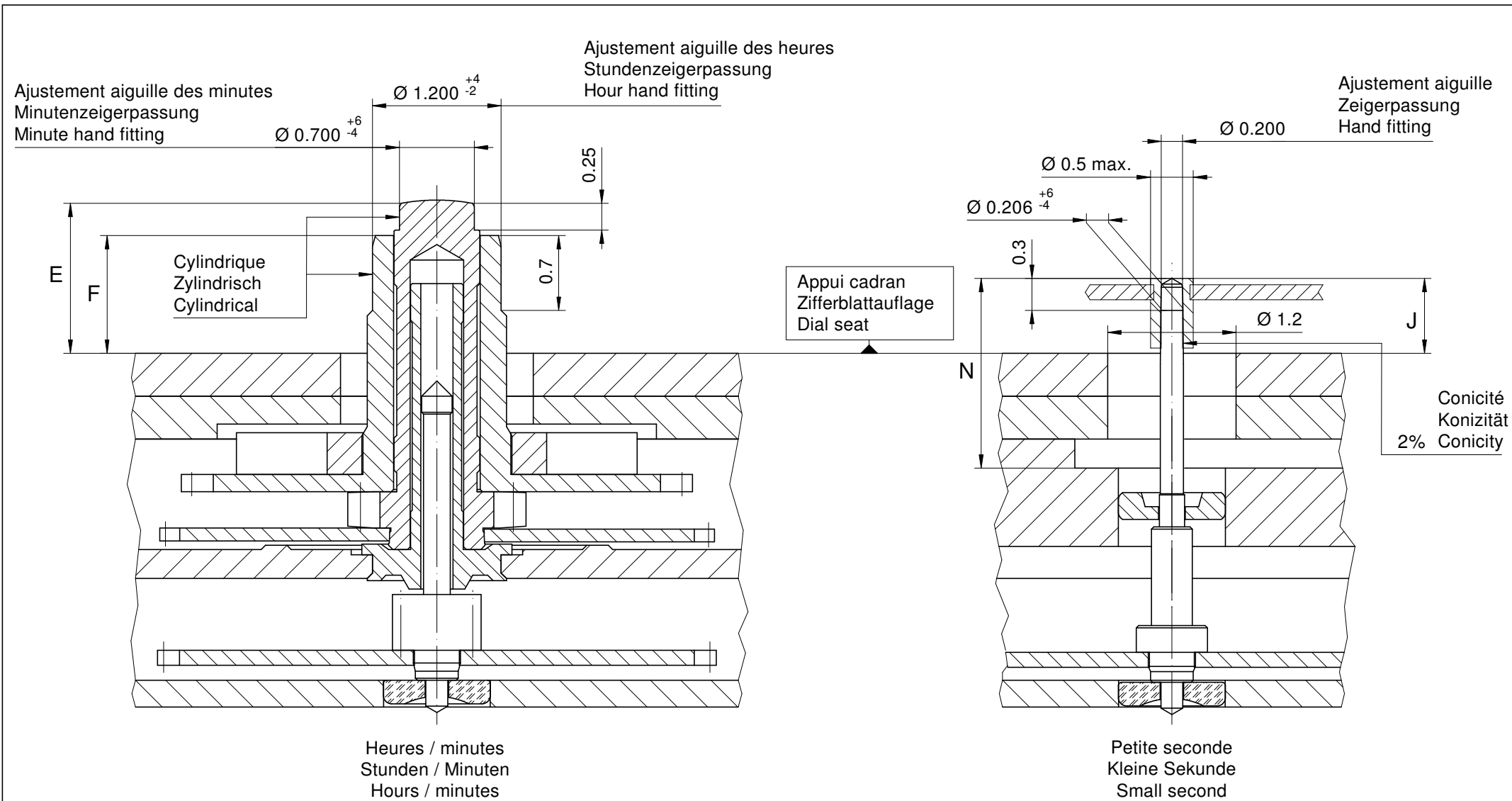




Tige	Date
Stellw.	Datum
Stem	Date
<b>03H</b>	<b>12H</b>
	<input type="checkbox"/>

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

<b>Cadran</b> <b>Zifferblatt</b> <b>Dial</b>	<b>11½"</b>	Issued	06 Mai 2004	mg
		Modified	21 Apr.2008 ÄA 4553	fl
		Released	YES	
		Tolerance	+/- 20 µm	
		Scale	5 : 1 (A4V)	
<b>RONDA</b>	<b>6004.B</b>	Sous réserve de modifications Aenderungen vorbehalten Modifications reserved		
		No.	5010.791	01



Aiguillages Zeigerwerkhöhe Hand fitting height				
Dépassement Höhe über Zifferblattaufgabe Height over dial seat				
	Chausée Minutenrohr Cannon-pinion	Roue des heures Stundenrad Hour wheel	Petite seconde Kleine Sekunde Small second	
No	E	F	J	N
1	1.40	1.10	0.70	1.75
2	1.60	1.30	0.90	1.95

Aiguillages Zeigerwerkhöhe Hand fitting height				
Peinture comprise / inkl. Farbe / Paint included				
Epaisseur maximum du cadran Maximale Zifferblattstärke Maximum dial thickness				
No	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	Epaisseur des aiguilles Zeigerdicke Hands thickness
1	1.00	0.70	0.25	0.15
2	1.20	0.90	0.45	0.15

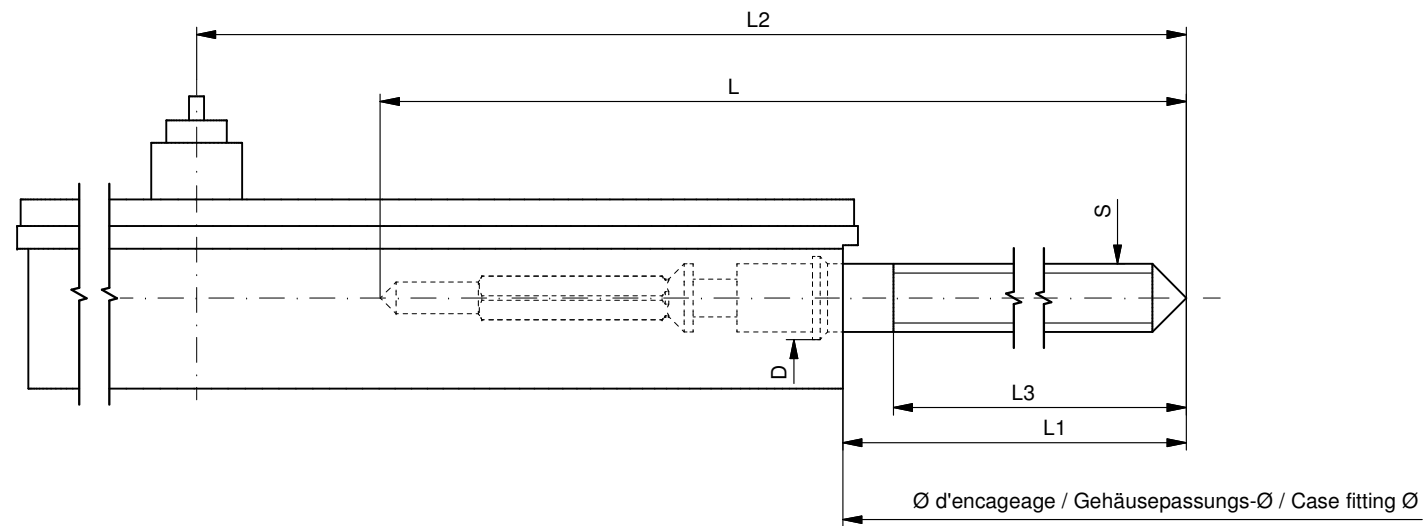
	Aig. des minutes Minutenzeiger Minute hand	Aig. des heures Stundenzeiger Hour hand	Aig. petite secondes Kleine Sekundenzeiger Small second hand	Lors de la pose d'aiguilles, le mouvement doit être soutenu. Beim Zeigersetzen muss das Werk abgestützt werden. The movement needs to be supported for hand setting.
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

<h2>Aiguillages Zeigerwerkhöhen 11½'' Hand fitting heights</h2>		Issued	02 Sep 2005	fl
		Modified	15 Okt 2014 ÄÄ 13275	dh
		Released	Yes	
		Tolerance	µm	
		Scale	20 : 1 (A3H)	
<h3>RONDA 6004.B</h3>		Sous réserve de modifications Änderungen vorbehalten Modifications reserved		
		No.	3316.099	10

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

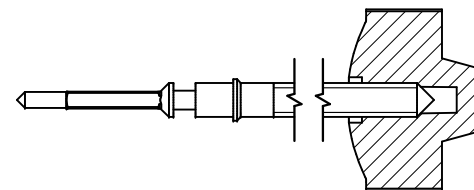
\* Bei abweichenden Werten, bitte technischen Kundendienst anfragen

\* 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)

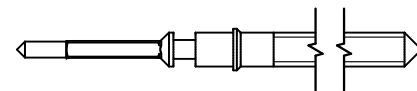
No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.189.CO	19.30	10.57	23.37	10.15	0.90	1.10



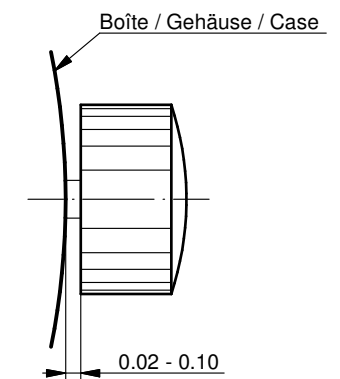
Couleur de la couronne Kronenfarbe Crown color	marron kastanienbraun chestnut
Code	UN 8018

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

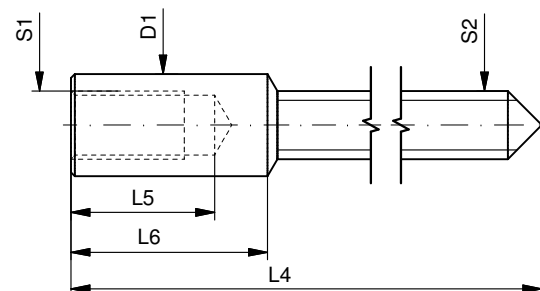


Couronne vissée  
 Geschraubte Krone  
 Screwed crown

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  
 Änderungen vorbehalten  
 Modifications reserved

No.	5030.021	01
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**Movement holder**  
*Removing setting stem*  
 H6XXX.1T



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

**Fitting dial and hands**

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

**Date switching duration**

*First and tenth digit discs*



~2hrs

**General Instructions**

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

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

*Permitted hand setting strengths:*

*Hr / min. hands: <40N*

*Other hands: <30N*

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

# 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 – 6003.B  
– 705 – 6004.B  
– 784  
– 785  
– 714  
– 715  
– 715Li

### RONDA mastertech

– 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

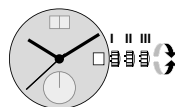
Cal. 505

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.

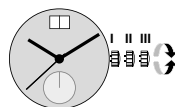
**Pos. III Setting the time**

- 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)

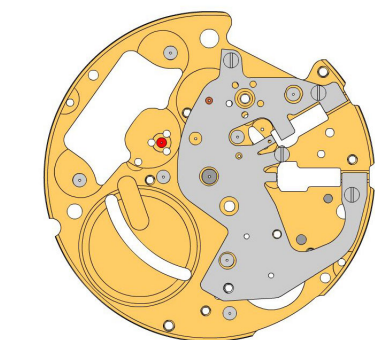
**Pos. II Quick-change correction for date**

*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.*

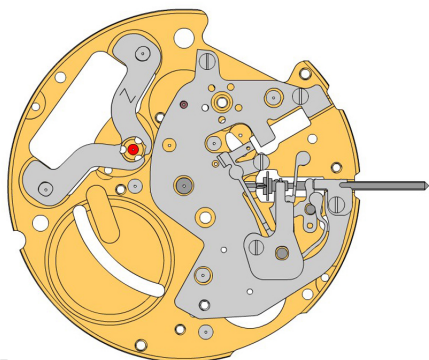
- Pull the crown out to position II (watch still running).
- Turn the crown until the current date appears.
- Push the crown back into position I.

**Pos. III Setting the time**

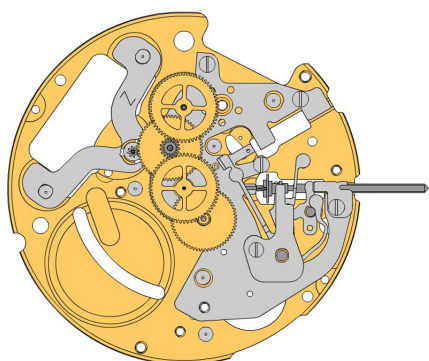
- Pull the crown out to position III (watch stopped).
- Turn the crown, until the current time is displayed (remember the 24-hour cycle).
- Push the crown back into position I.






A

















B

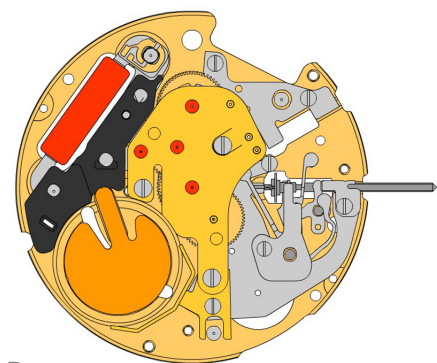


C

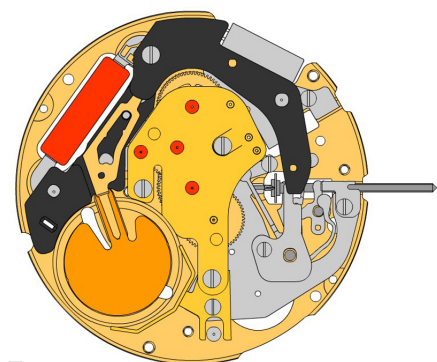
2000.628.G 1.		Main plate
2130.204.CO 2.		Setting mechanism cover Setting mechanism cover held by 3 screws 4000.321.
4000.321 3.		Screw

3017.057 4.		Setting lever
3015.074 5.		Yoke (3 positions) Tensioning the spring arm.
3001.042.FI 6.		Sliding pinion
3000.189.CO 7.		Setting stem
2020.166 8.		Yoke bridge Yoke bridge held by 1 screw 4000.228.
4000.328 9.		Screw
2130.199 10.		Stem maintaining plate Stem maintaining plate held by 1 screw 4000.312.
4000.312 11.		Screw
3622.042 12.		Stator Mark [Z] on stator.

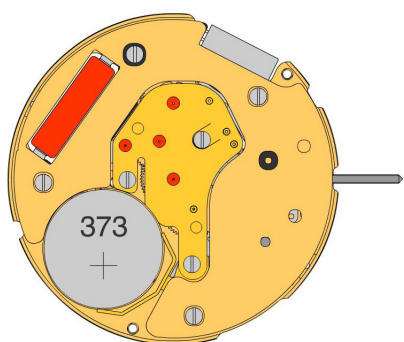
3715.103.RK 13.		Rotor
3147.056.CO 14.		Intermediate wheel
3122.059.CO 15.		Third wheel
3136.163.CO 16.		Center second wheel short
3136.167.CO 17.		Small second wheel (Aig.1)
















D

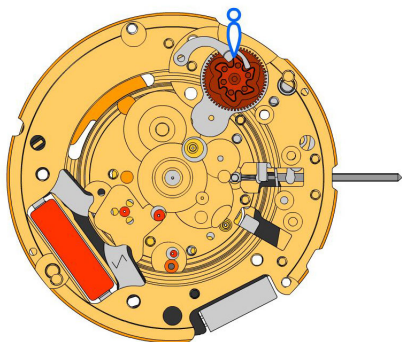





E

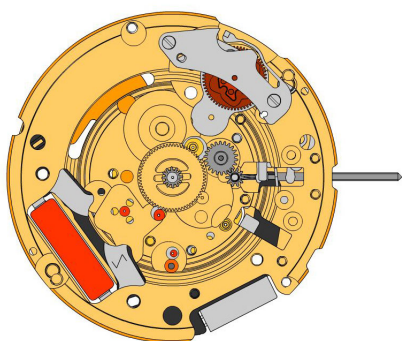







F

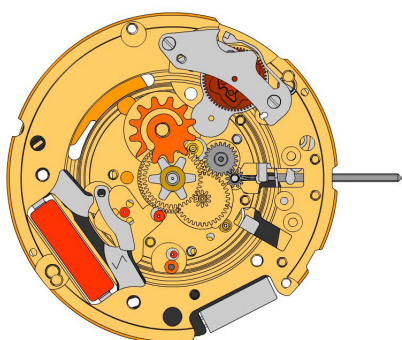
2020.180.G 18.		<b>Train wheel bridge</b> Train wheel bridge held by 3 screws 4000.279.
4000.279 19.		<b>Screw</b>
3601.117.G 20.		<b>Battery clamp +</b> Lateral bridle held by 1 screw 4000.244.
4000.244 21.		<b>Screw</b>
3621.060.RK 22.		<b>Coil</b> Attention: Please hold the coil only on the grey coil core.
3603.074 23.		<b>Bridle (-) insulator</b>
3603.075 24.		<b>Battery insulator</b>
3601.116 25.		<b>Bridle -</b> Place bridle as shown on graphics.
3612.181 26.		<b>Electronic module</b> Electronic module held by 1 screw 4000.318. Electronic measurements may be realised now.
4000.318 27.		<b>Screw</b>
2130.168.G.M01.6004B 28.		<b>Electronic module cover</b> Electronic module cover held by 3 screws 4000.102.
4000.102 29.		<b>Screw</b>
3600.031.HGF 30.		<b>Battery 373</b>







**G**

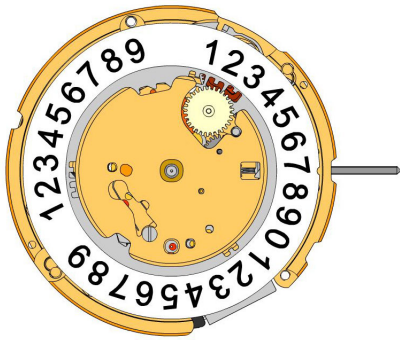
2000.628.G 31.		Main plate
3004.232 32.		Tens indicator driving wheel The short tooth of the tens indicator driving wheel must point to the center of the movement.
3500.060 33.		Tens jumper


**H**






2130.171 34.		Tens jumper maintaining plate Tens jumper maintaining plate held by 2 screws 4000.332. Tensioning the spring arm.
4000.332 35.		Screw
3004.182.FI 36.		Setting wheel
3004.183.FI 37.		Intermediate setting wheel
3305.307.CO 38.		Canon pinion with driver (Aig.1, closed)

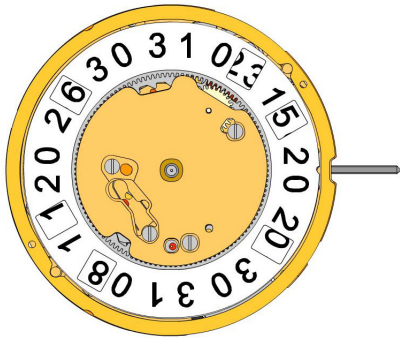

**I**

3007.073.CO 39.		Minute wheel
3301.272.CO 40.		Hour wheel (Aig.1)
3315.001 41.		Friction spring
3004.187 42.		Date indicator driving wheel
3500.061 43.		Date jumper











J

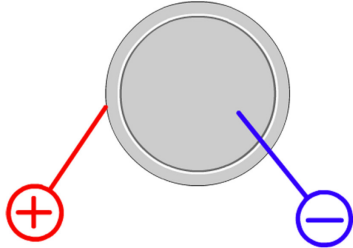
3504.217.AF.1.A 44.		<b>Units indicator (standard)</b> Nick of the indicator at 3 o'clock.
3147.057 45.		<b>Tens intermediate wheel</b>
2130.169 46.		<b>Date indicator maintaining plate</b> Date indicator maintaining plate held by 1 screw 4000.312.
4000.312 47.		<b>Screw</b>
3905.070 48.		<b>Date jumper spring</b> Insert the date jumper spring in the provided opening.



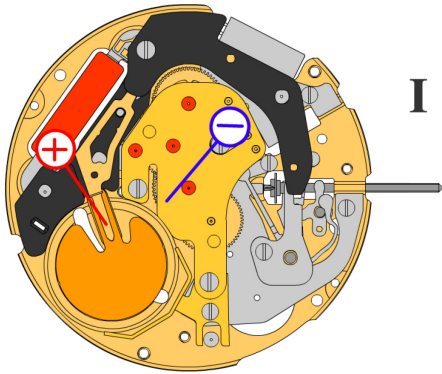
K

3504.218.AF.1.A 49.		<b>Tens indicator (standard)</b> Nick of the indicator at 3 o'clock.
2130.170.G 50.		<b>Date mechanism maintaining plate</b> Date mechanism maintaining plate held by 3 screws 4000.312.
4000.312 51.		<b>Screw</b>
3506.075.G 52.		<b>Dial support</b>

8200 53.		<b>Moebius 8200</b>
9014 54.		<b>Moebius 9014</b>
124 55.		<b>Jismaa 124</b>
9020 56.		<b>Moebius 9020</b>

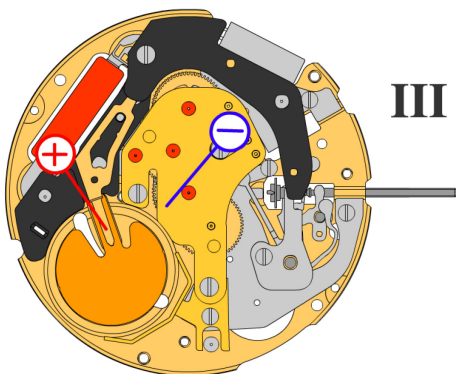


Battery	<b>373</b>
Voltage	<b>1.55 V</b>



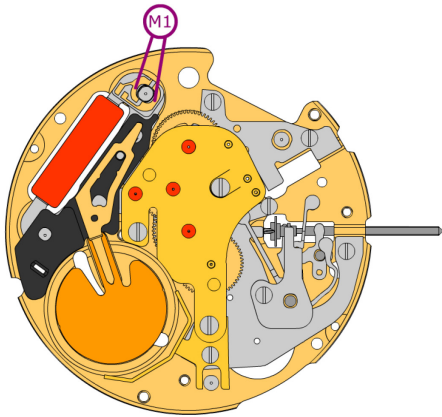
*Setting stem in position I, calendar not in gear,  
60 s measuring interval for rate and consumption:*

Typical consumption	<b>1.03 <math>\mu</math>A</b>
Maximal consumption	<b>1.85 <math>\mu</math>A</b>
Rate	<b>-10s/M. .. +20s/M.</b>
Lower working voltage limit	<b>1.20 V</b>



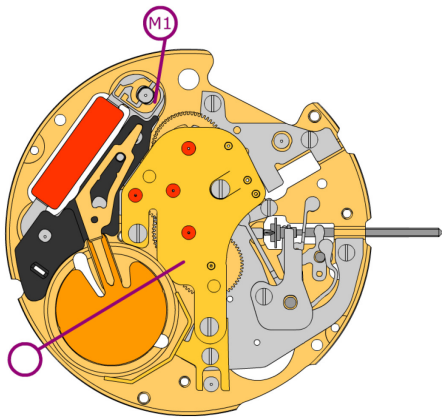
*Setting stem in position III, 60 s measuring interval:*

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



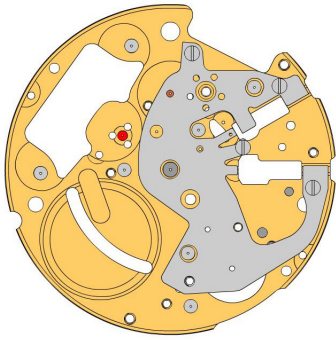
Coil resistance M1

**1.61 kΩ .. 1.81 kΩ**

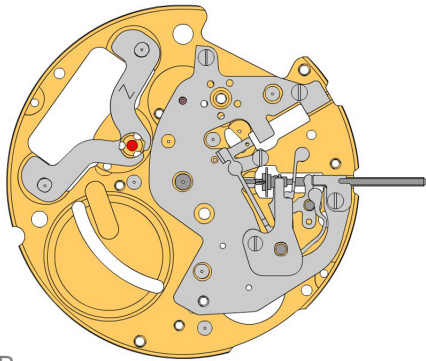


Coil isolation M1

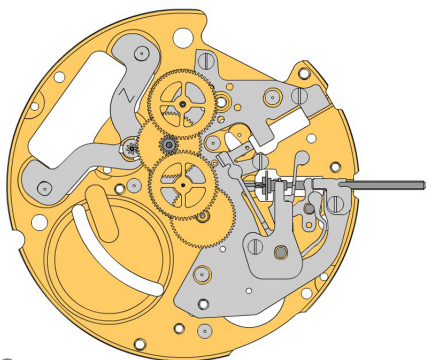
**∞ kΩ**




















A

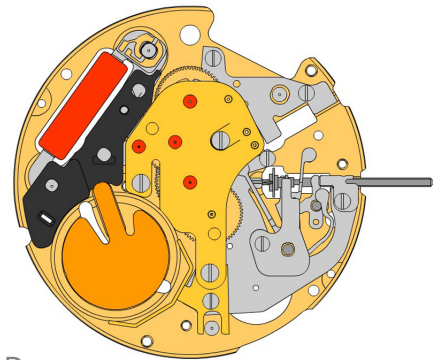
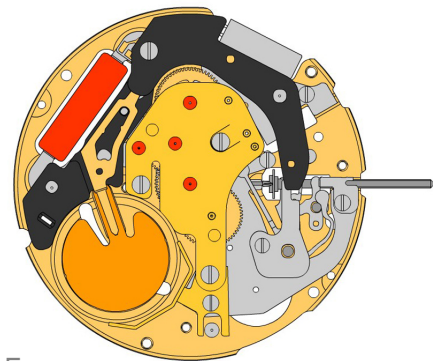
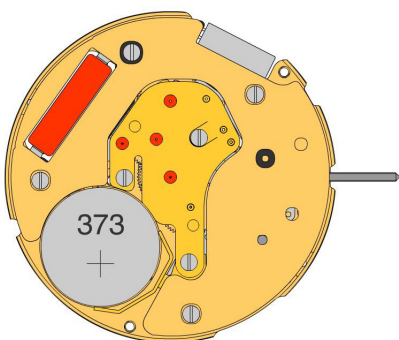















B

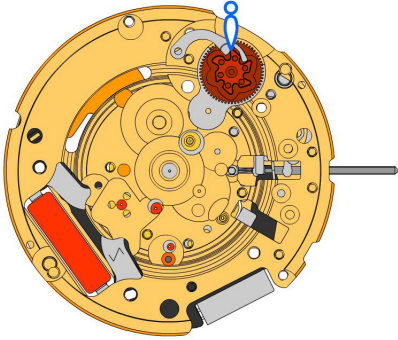
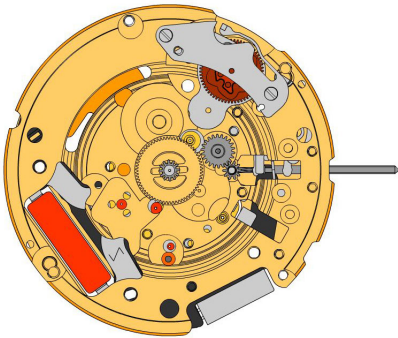
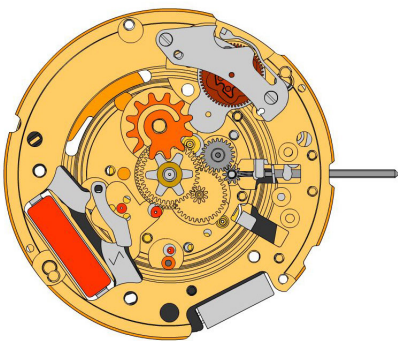















C

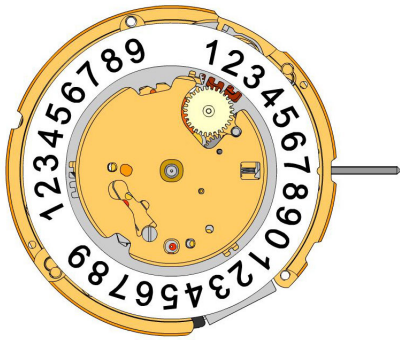
2000.628.G 1.		Main plate
2130.167.CO 2.		Setting mechanism cover Setting mechanism cover held by 3 screws 4000.321. Parts 2130.167.CO and 3004.188 must be exchanged together.
4000.321 3.		Screw
3017.057 4.		Setting lever
3015.074 5.		Yoke (3 positions) Tensioning the spring arm.
3001.042.FI 6.		Sliding pinion
3000.189.CO 7.		Setting stem
2020.166 8.		Yoke bridge Yoke bridge held by 1 screw 4000.228.
4000.328 9.		Screw
2130.199 10.		Stem maintaining plate Stem maintaining plate held by 1 screw 4000.312.
4000.312 11.		Screw
3622.042 12.		Stator Mark [Z] on stator.
3715.103.RK 13.		Rotor
3147.056.CO 14.		Intermediate wheel
3122.059.CO 15.		Third wheel
3136.163.CO 16.		Center second wheel short
3136.167.CO 17.		Small second wheel (Aig.1)


**D**

**E**

**F**

2020.180.G 18.		<b>Train wheel bridge</b> Train wheel bridge held by 3 screws 4000.279.
4000.279 19.		<b>Screw</b>
3601.117.G 20.		<b>Battery clamp +</b> Lateral bridle held by 1 screw 4000.244.
4000.244 21.		<b>Screw</b>
3621.060.RK 22.		<b>Coil</b> Attention: Please hold the coil only on the grey coil core.
3603.074 23.		<b>Bridle (-) insulator</b>
3603.075 24.		<b>Battery insulator</b>
3601.116 25.		<b>Bridle -</b> Place bridle as shown on graphics.
3612.181 26.		<b>Electronic module</b> Electronic module held by 1 screw 4000.318. Electronic measurements may be realised now.
4000.318 27.		<b>Screw</b>
2130.168.G.M01.6004B 28.		<b>Electronic module cover</b> Electronic module cover held by 3 screws 4000.102.
4000.102 29.		<b>Screw</b>
3600.031.HGF 30.		<b>Battery 373</b>


**G**

**H**

**I**


2000.628.G 31.		Main plate
3004.188 32.		Tens indicator driving wheel The short tooth of the tens indicator driving wheel must point to the center of the movement. Parts 2130.167.CO and 3004.188 must be exchanged together.
3500.060 33.		Tens jumper
2130.171 34.		Tens jumper maintaining plate Tens jumper maintaining plate held by 2 screws 4000.332. Tensioning the spring arm.
4000.332 35.		Screw
3004.182.FI 36.		Setting wheel
3004.183.FI 37.		Intermediate setting wheel
3305.307.CO 38.		Cannon pinion with driver (Aig.1, closed)
3007.073.CO 39.		Minute wheel
3301.272.CO 40.		Hour wheel (Aig.1)
3315.001 41.		Friction spring
3004.187 42.		Date indicator driving wheel
3500.061 43.		Date jumper




J

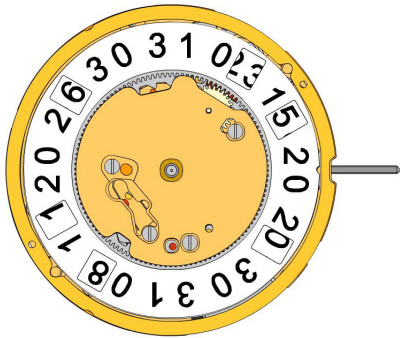
3504.217.AF.1.A  
44.  Units indicator (standard)  
Nick of the indicator at 3 o'clock.

3147.057  
45.  Tens intermediate wheel

2130.169  
46.  Date indicator maintaining plate  
Date indicator maintaining plate held by 1 screw 4000.312.


4000.312  
47.  Screw

3905.070  
48.  Date jumper spring  
Insert the date jumper spring in the provided opening.



K

3504.218.AF.1.A  
49.  Tens indicator (standard)  
Nick of the indicator at 3 o'clock.

2130.170.G  
50.  Date mechanism maintaining plate  
Date mechanism maintaining plate held by 3 screws 4000.312.

4000.312  
51.  Screw

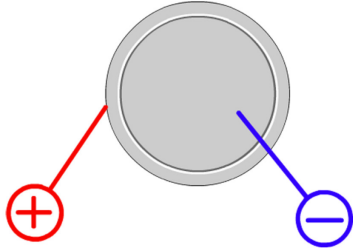
3506.075.G  
52.  Dial support

8200  
53.  Moebius 8200

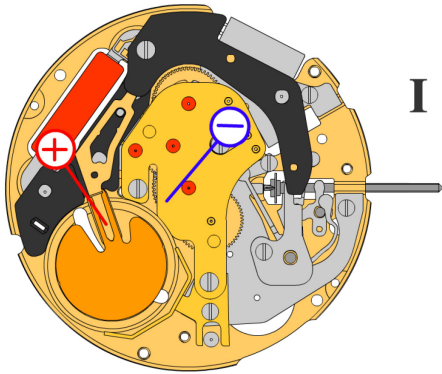
9014  
54.  Moebius 9014

124  
55.  Jismaa 124

9020  
56.  Moebius 9020

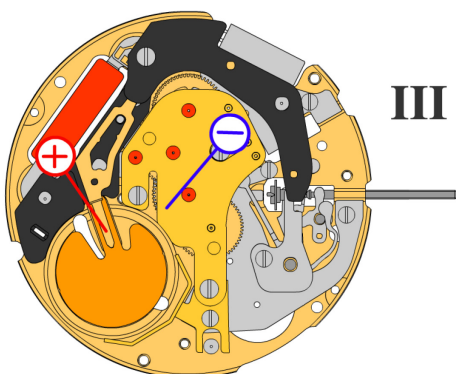


Battery	<b>373</b>
Voltage	<b>1.55 V</b>



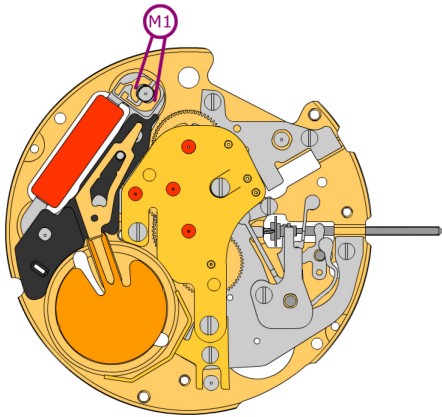
*Setting stem in position I, calendar not in gear,  
60 s measuring interval for rate and consumption:*

Typical consumption	<b>1.03 <math>\mu</math>A</b>
Maximal consumption	<b>1.85 <math>\mu</math>A</b>
Rate	<b>-10s/M. .. +20s/M.</b>
Lower working voltage limit	<b>1.20 V</b>



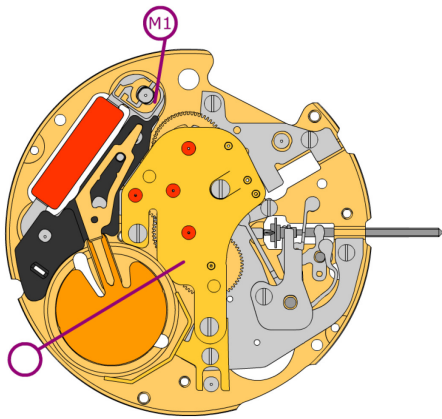
*Setting stem in position III, 60 s measuring interval:*

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



Coil resistance M1

**1.61 kΩ .. 1.81 kΩ**



Coil isolation M1

**∞ kΩ**