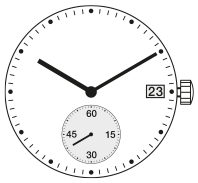
Caliber 6004.D – 11½'''



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

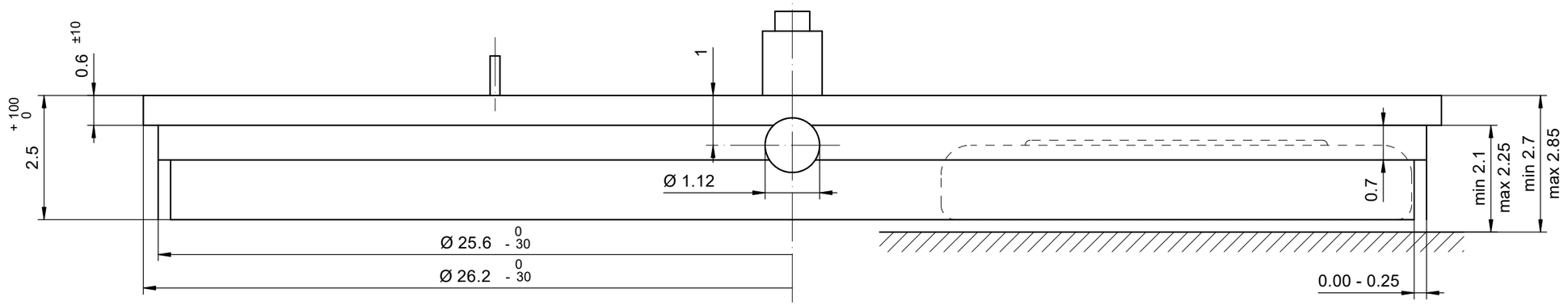
Caliber 6004.D – 11½'''

Technical Specifications

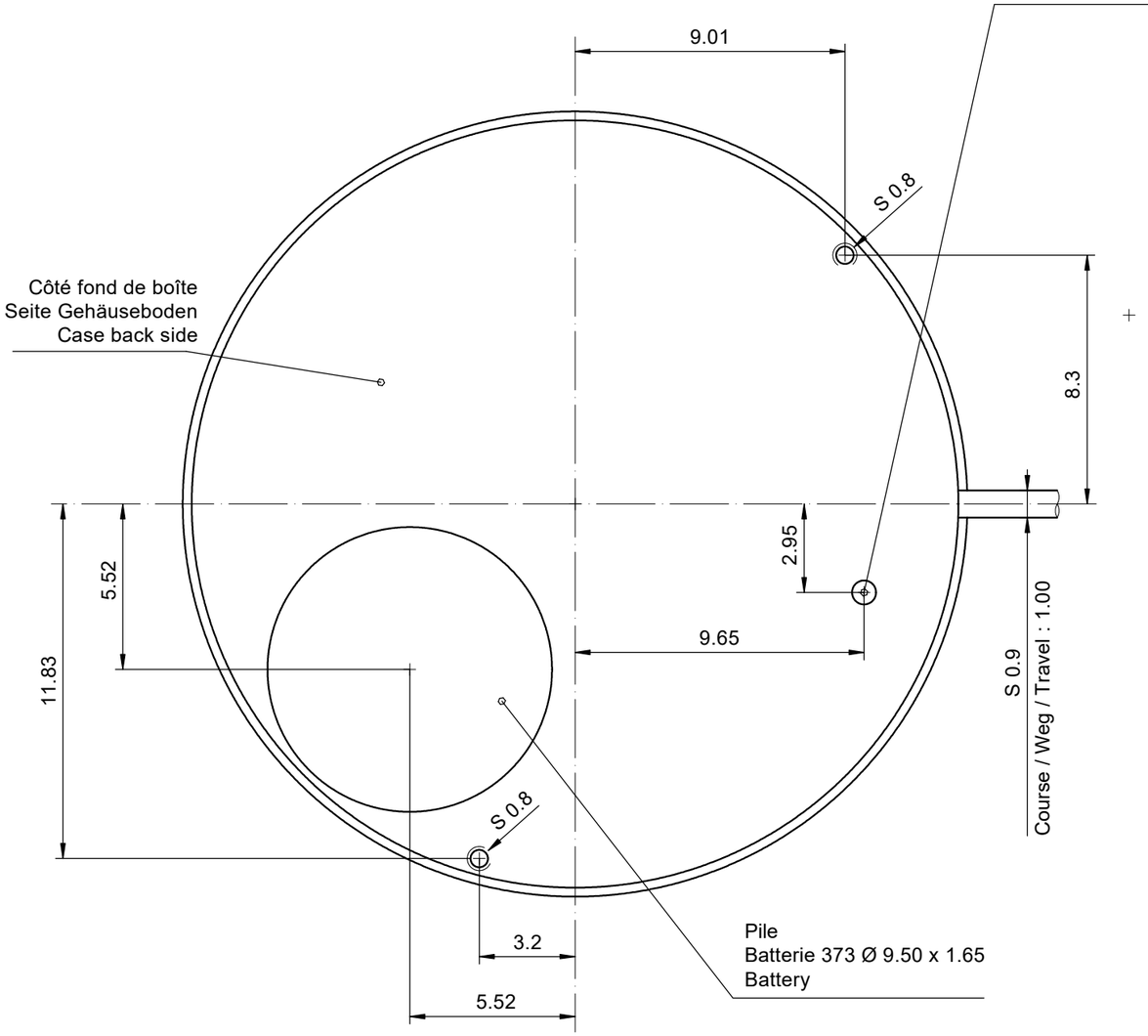
Diameter Total	26.00 mm
Case fitting	25.60 mm
Movement height	2.50 mm
Height over standard battery	2.50 mm
Movement rest	0.60 mm
Height over stem	1.00 mm
Length of stem travel	1.00 mm
Stem thread	0.90 mm
Useful torque second – typical	6 µNm
Useful torque minute – typical	300 µNm
Operating temperature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

Battery Specifications

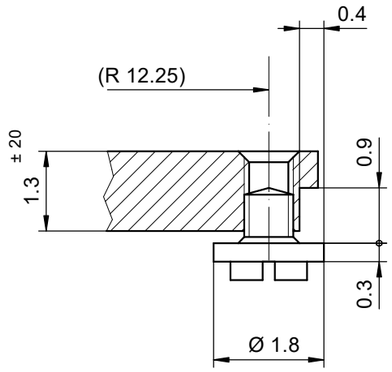
Standard battery	No. 373
Standard battery life	40 months
Battery voltage	1.5 V
Current consumption – typical	1.03 µA (Date Mechanism not in Gear)
Current consumption – maximum	1.45 µA (Date Mechanism not in Gear)



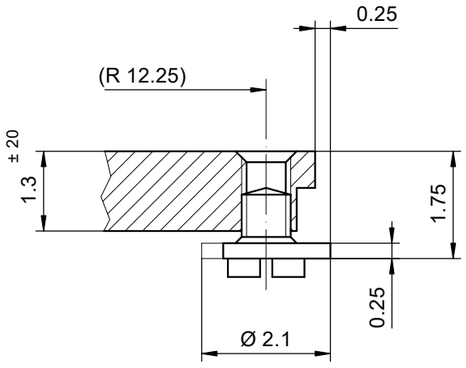
Position pour extraire la tige
Position zum entfernen der Stellwelle
Position to remove the stem



Vis No. :
Schraube Nr.: 4000.236
Screw No. :



Vis No. :
Schraube Nr.: 4000.237
Screw No. :



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

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

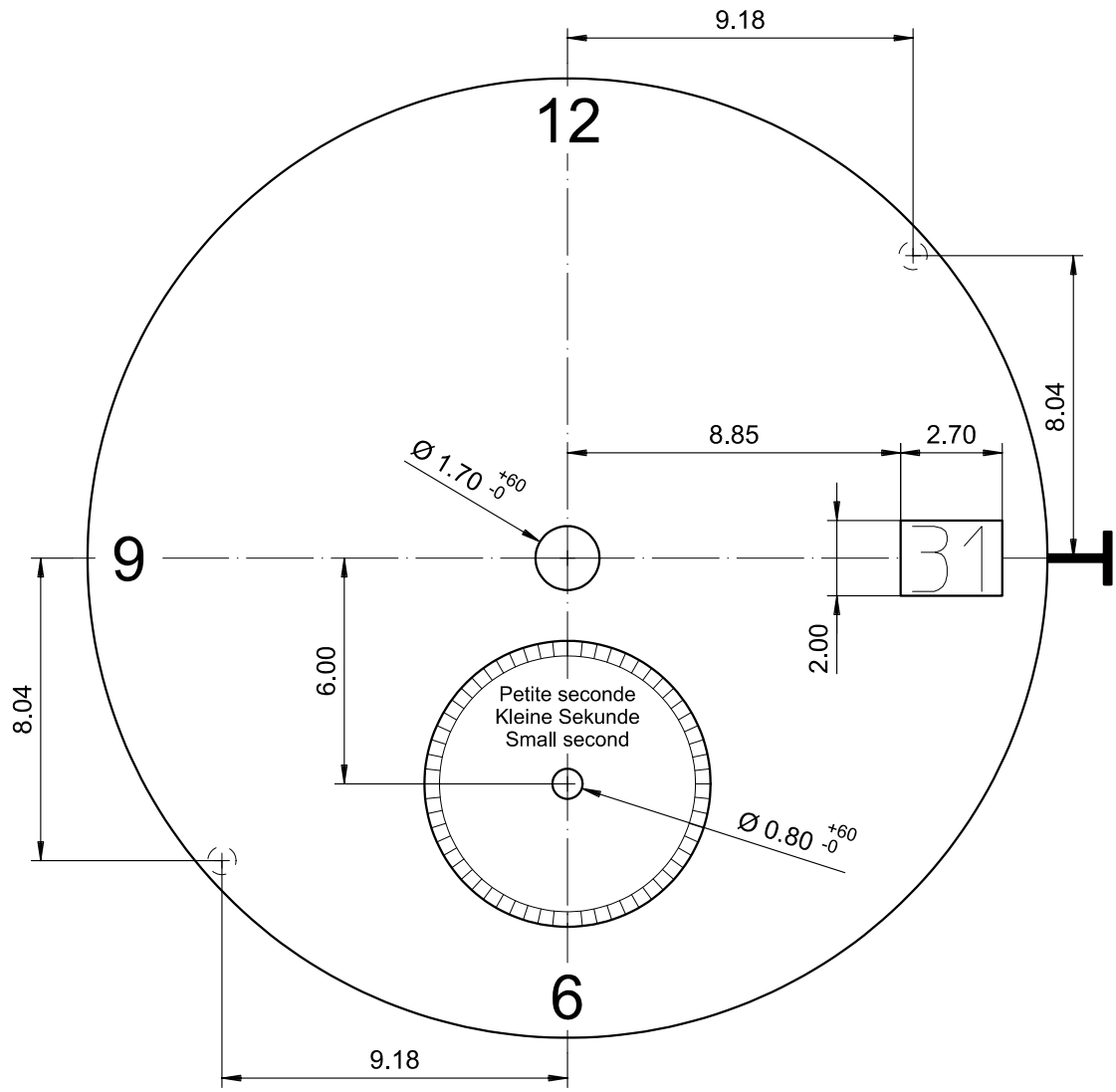
Cage
Uhrwerkgestell 11½'''
Frame

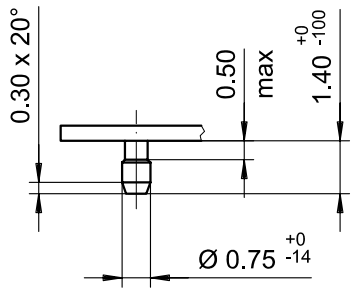
RONDA | 6004.D

Issued	22.11.2006		cm
Modified	31.08.2020		jp5226
Released	YES		
Mod. No.	42691		
Tolerance	±20 µm		
Scale	10 : 1	Page 1/1	A3

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No.	5000.333	03





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

Tige	Date
Stellw.	Datum
Stem	Date
3H	3H

Cadran
Zifferblatt
Dial

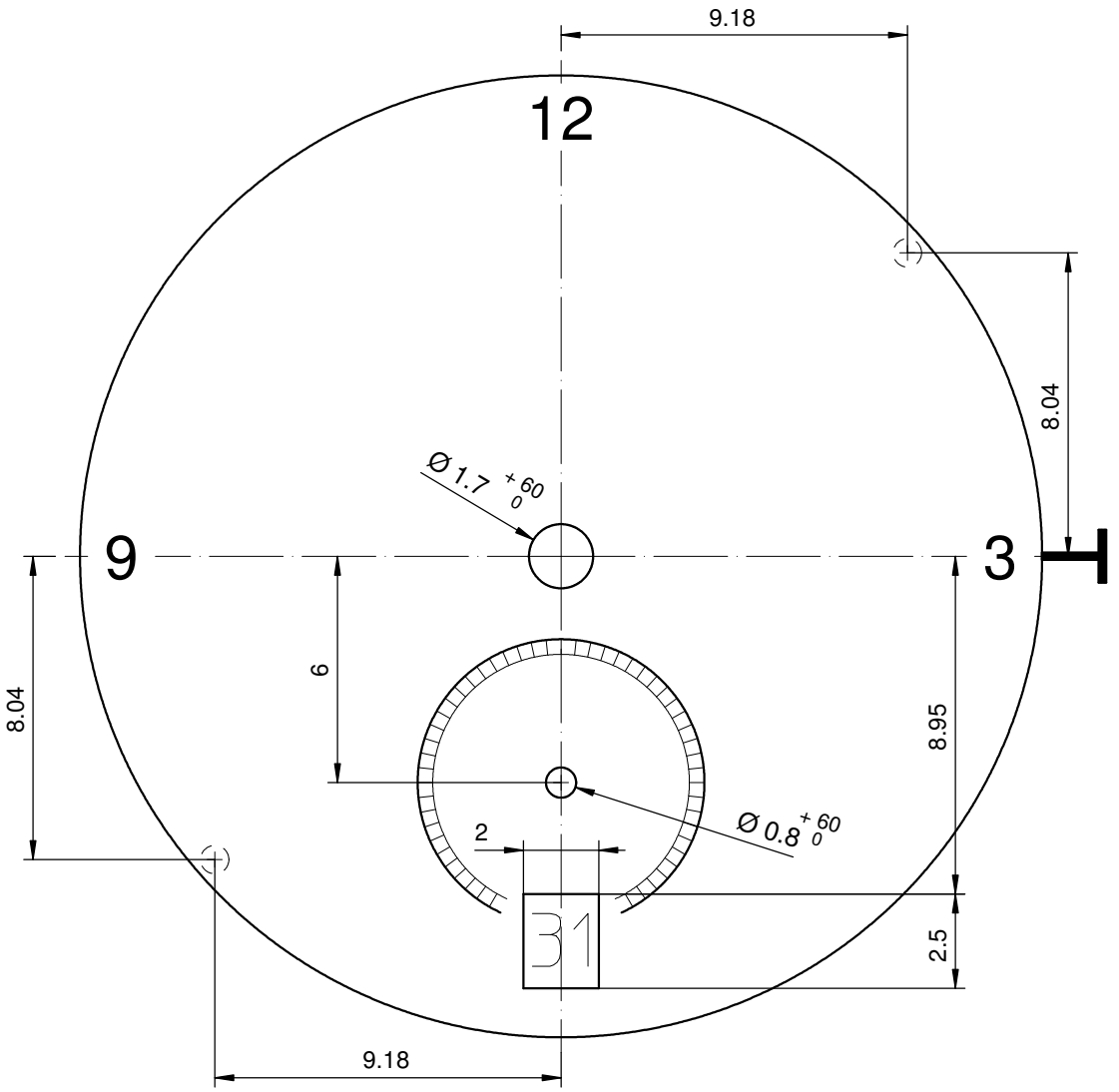
11½‴

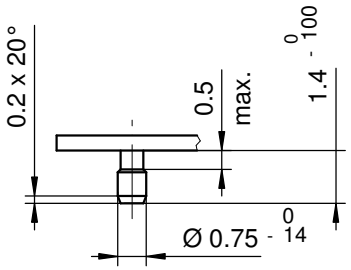
Issued	23 Nov 2006	cm
Modified	21.Apr.2008 ÄA 4553	fl
Released	YES	
Tolerance	+/- 20 µm	
Scale	5 : 1 (A4V)	

RONDA | 6004.D

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No. 5010.762 01





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

Tige	Date
Stellw.	Datum
Stem	Date
3H	6H

Cadran
Zifferblatt
Dial

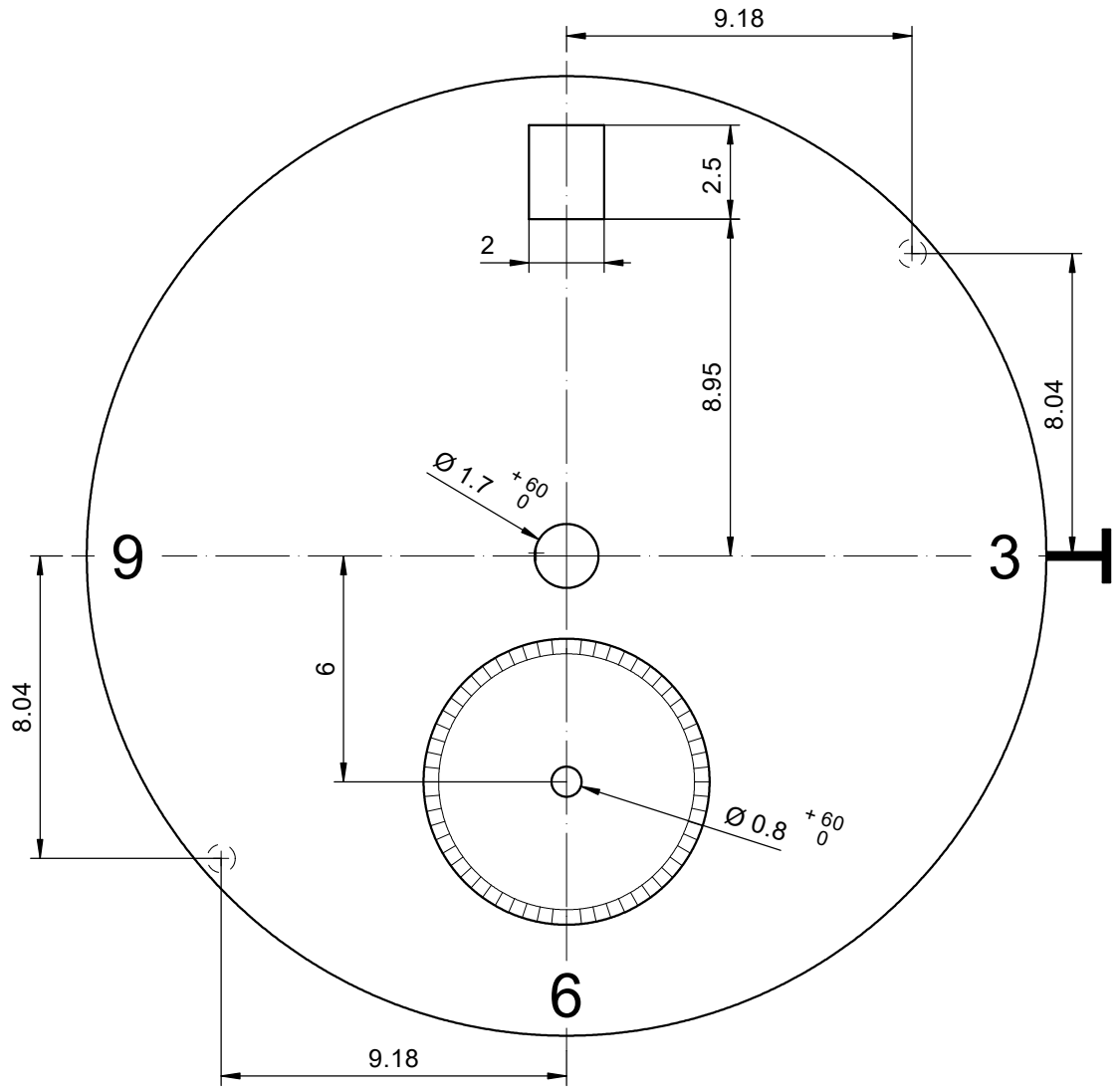
11½'''

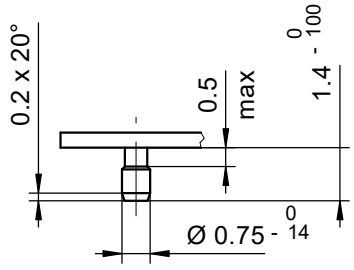
Issued	23 Nov 2006	cm
Modified	13 Mär 2012 ÄA 11870	ds
Released	YES	
Tolerance	+/- 20 µm	
Scale	5 : 1 (A4V)	

RONDA | 6004.D

Sous réserve de modifications
Aenderungenvorbehalten
Modificationsreserved

No.	5010.763	01





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

Tige	Date
Stellw.	Datum
Stem	Date
3H	12H

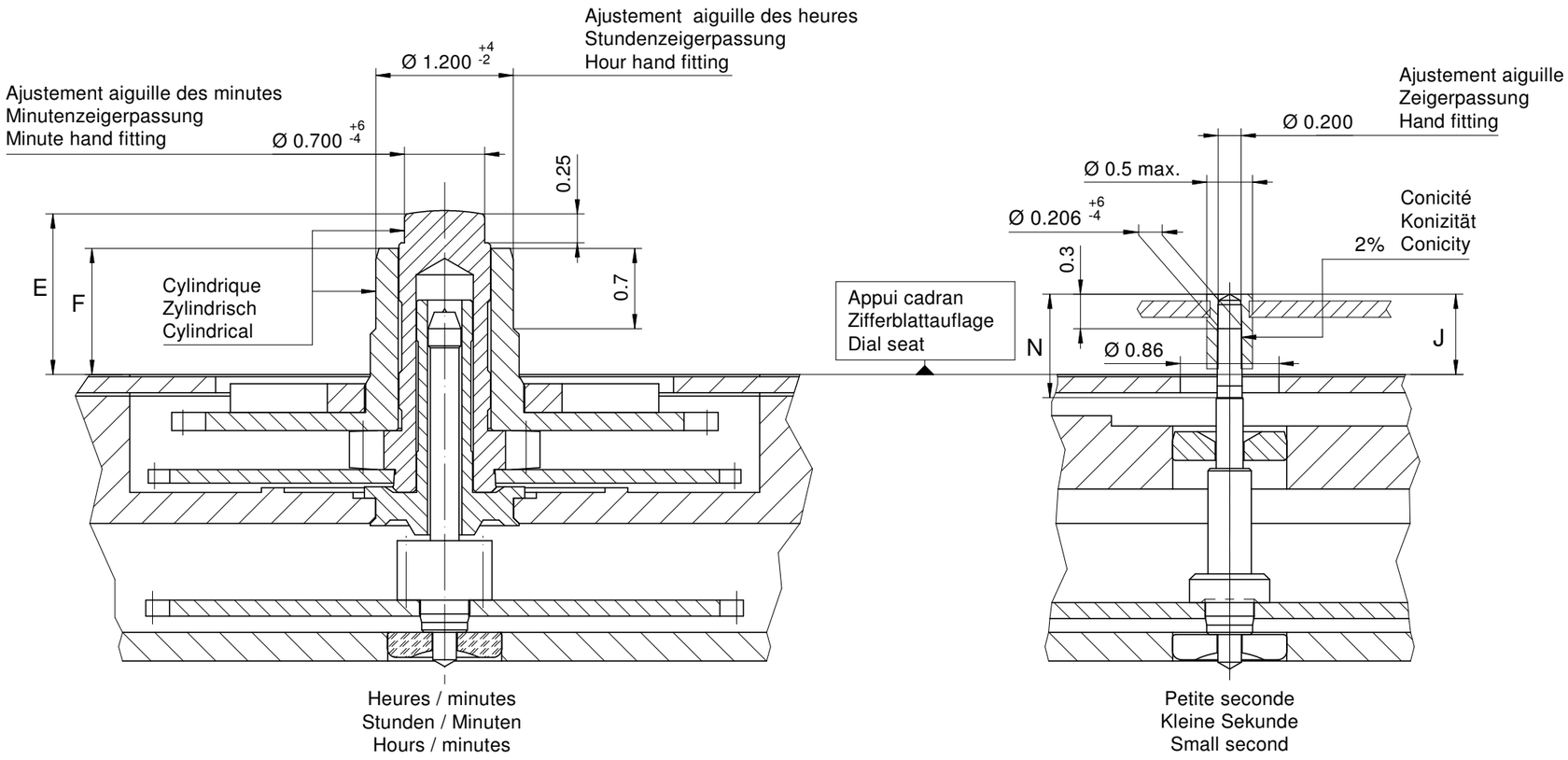
Cadran
Zifferblatt 11½'''
Dial

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
Aenderungen vorbehalten
Modifications reserved

No.	5010.764	00



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

Aiguillages Zeigerwerkhöhe Hand fitting height					
Peinture comprise / inkl. Farbe / Paint included					
	Epaisseur maximum du cadran Maximale Zifferblattdicke Maximum dial thickness				
No	Sous l'aiguille des 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
-					

	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 ^{2} max.	-	-	0.4	Inertie / Massenträgheit / Inertia *
N max.	40	40	30	Force de chassage / Aufpresskraft / Force

Aiguillages
Zeigerwerkhöhen 11½'''
Hand fitting heights

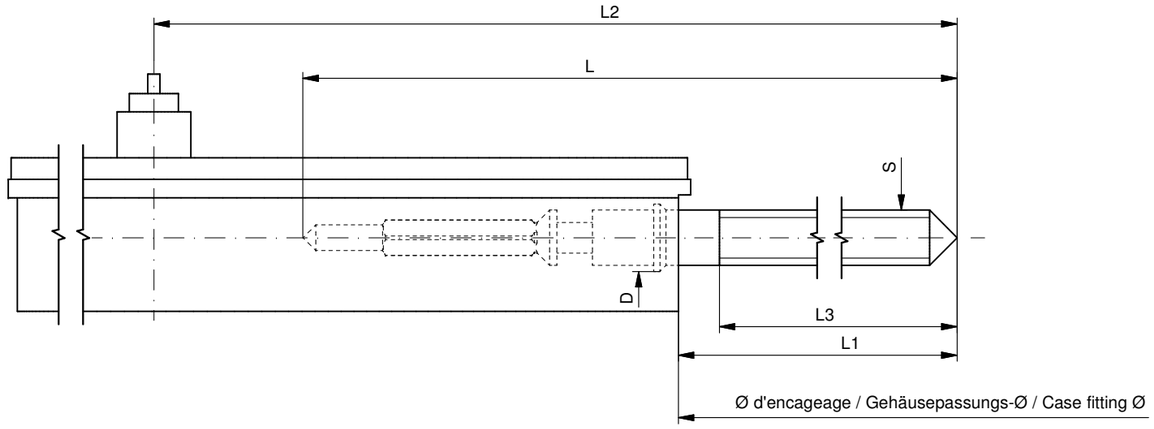
Issued	14 Nov 2006	cm
Modified	15 Okt 2014 ÄA 13275	dh
Released	Yes	
Tolerance	µm	
Scale	20 : 1 (A3H)	

RONDA | 6004.D

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

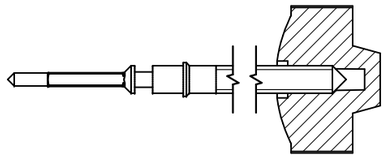
No. 3316.102 08

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

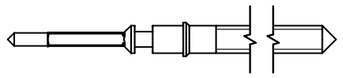
No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.189.CO	19.30	10.57	23.37	10.15	0.90	1.10



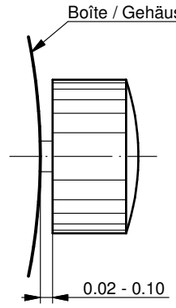
Couleur de la couronne Kronenfarbe Crown color	marron kastanienbraun chestnut
Code	UN 8018

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

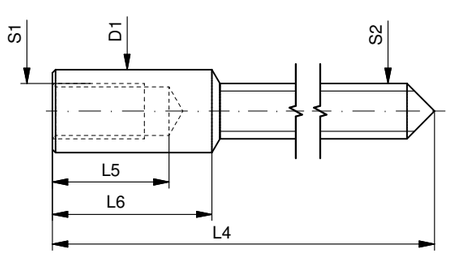


Couronne vissée
Geschraubte Krone
Screwed crown

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

No.	5030.021	01

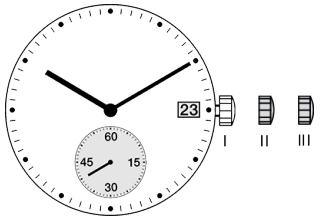
Movement holder
Removing setting stem
H6XXX.1T

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

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

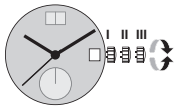
Cal. 715Li:
Battery type: CR 2016

Precision: +20/-10 seconds per month

CE UK CA

08/2023

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.

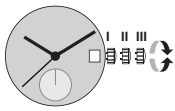
Cal. 6003.D & 6004.D:
– *Turn the crown until the required date appears.*

– 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**

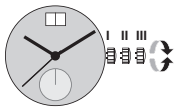
Blocking time for the quick-change day correction is from approx. 9.30 pm and midnight.

– 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**

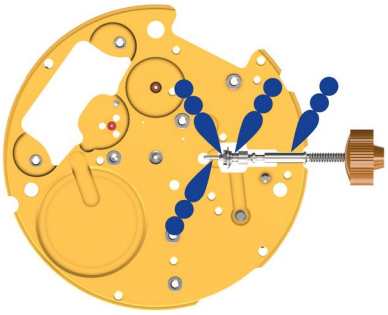
The date can also be changed during the day-changing phase between approx. 8.00 pm and midnight.
The date of the following day has to be set, because no automatic date change takes place at midnight.

– 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.

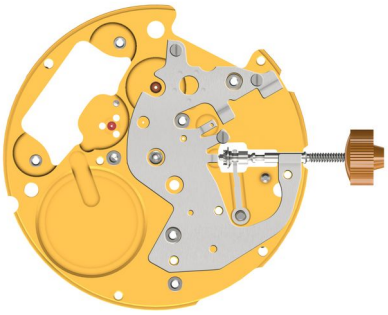
Pos. III **Setting the time**

– 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.

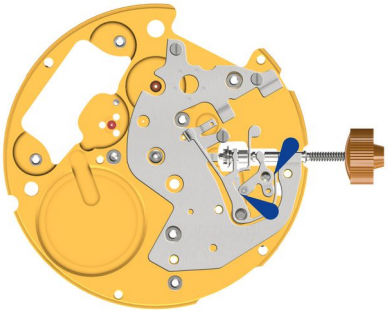
Technical Instruction | TI_ti6004.D



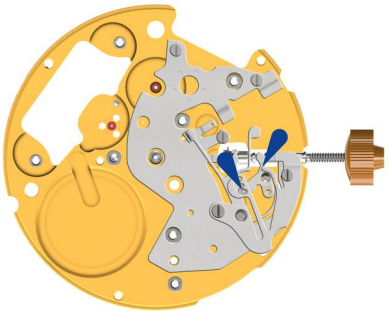
1		2000.675.G	Main plate
2		3000.189.CO	Working stem
3		3001.056.FI	Sliding pinion D
4		9020	Moebius 9020



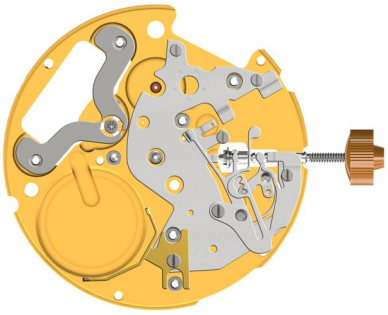
5		2130.252	Setting mechanisme cover
6		4000.321	Screw
7		4000.321	Screw
8		4000.321	Screw
9		3015.083	Bottom yoke

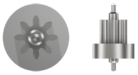


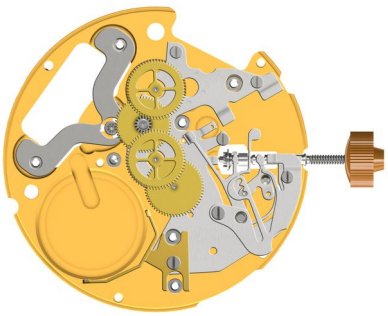
10		3017.056.CO	Setting lever
11		3015.082	Yoke
12		8200	Moebius 8200

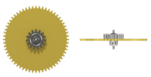
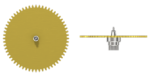
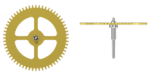
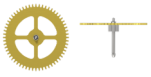


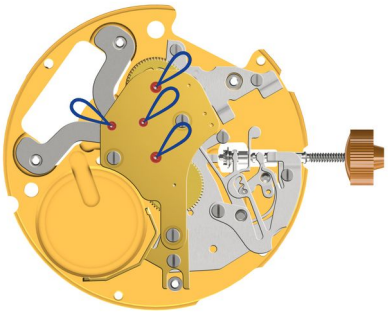
13		3905.069	Setting lever jumper Tensioning the spring arm.
14		4000.312	Screw
15		4000.328	Screw
16		8200	Moebius 8200



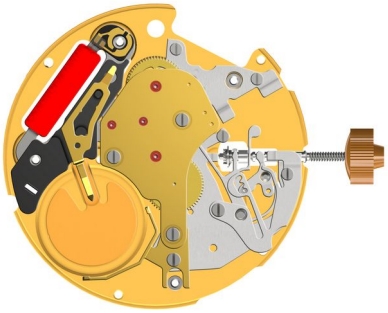
17		3601.117.G	Battery clamp (+)
18		4000.244	Screw
19		3622.042	Stator
20		3715.103.RK	Rotor



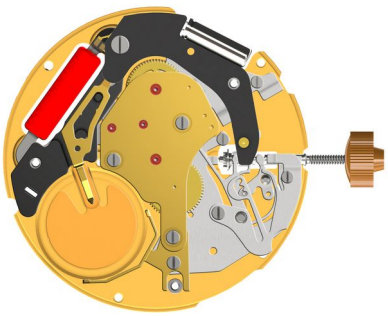
21		3147.056.CO	Intermediate wheel
22		3122.059.CO	Third wheel
23		3136.168.CO	Small second wheel (Aig.)
24		3136.163.CO	Center second wheel short (Aig.)



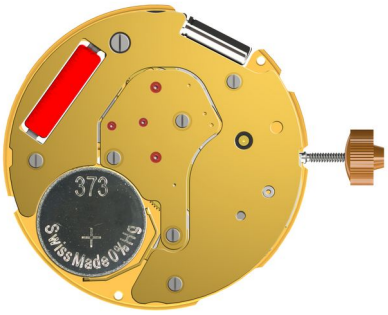
25		2020.180.G	Train wheel bridge
26		4000.279	Screw
27		4000.279	Screw
28		4000.279	Screw
29		9014	Moebius 9014



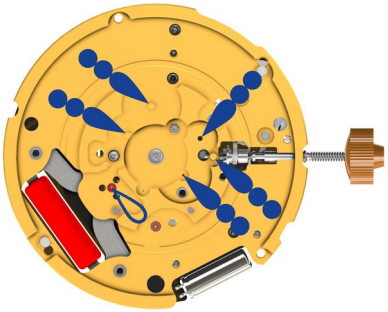
30		3621.060.RK	Coil Attention: Please hold the coil only on the grey coil core.
31		3603.075	Battery insulator
32		3603.074	Bridle (-) insulator
33		3601.116	Bridle -



34		3612.270.RK	Electronic module
35		4000.318	Screw

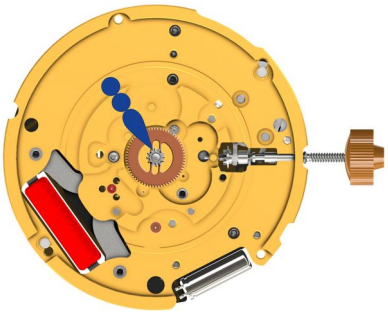


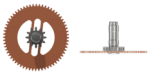
36		2130.168.G.M01.6004D	Electronic module cover
37		4000.102	Screw
38		4000.102	Screw
39		4000.102	Screw
40		3600.031.HGF	Battery 373 (Ø 9.45 x 1.65)

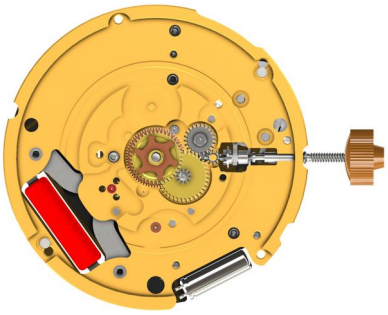


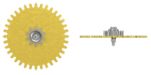
41		9014 / 9020 1x Moebius 9014 / 5x Moebius 9020	Moebius 9014 / Moebius 9020

42		9020	Moebius 9020

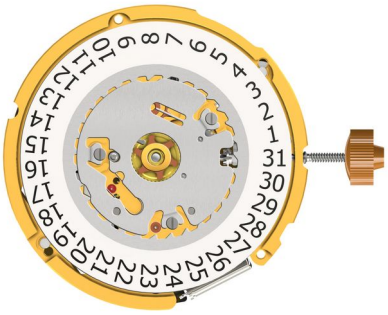


43		3305.345.CO	Cannon pinion (Aig.)
44		9020	Moebius 9020



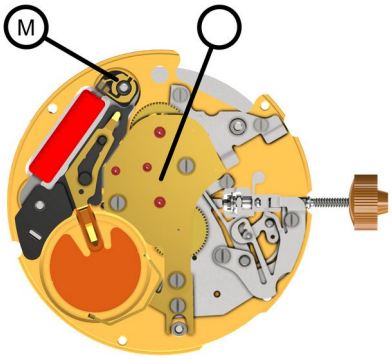
45		3004.253.FI	Setting wheel
46		3004.252.FI	Intermediate setting wheel
47		3007.087.CO	Minute wheel
48		3301.335.CO	Hour wheel (Aig.)

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 Nick of the indicator at 3 o`clock.	Date indicator (T3, G3)
53		3500.077	Date jumper
54		8200	Moebius 8200

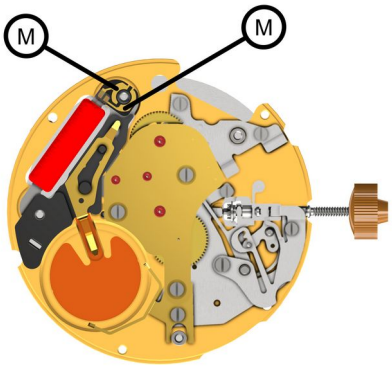


55		3905.103	Date jumper spring
56		2130.217	Date indicator maintaining plate
57		4000.300	Screw
58		4000.300	Screw
59		4000.300	Screw

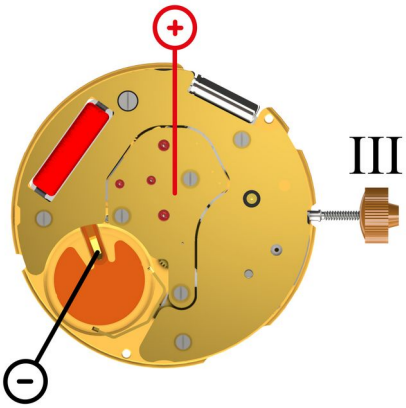
Measurement



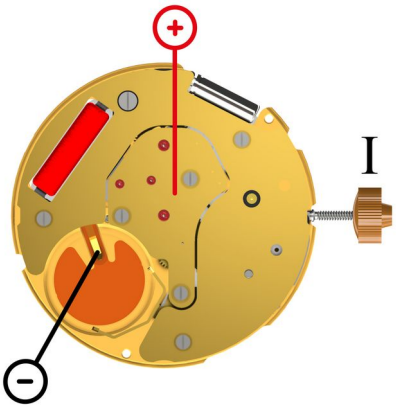
Coil insulation M
infinite



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



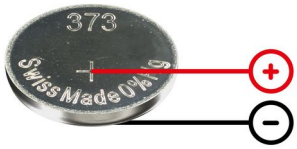
Setting stem in position III, 60 s measuring interval.
(typ./max.) 0.10 / 0.30µA



Setting stem in position I, calendar not in gear, 60s measuring interval.
(typ./max.) 1.03 / 1.85 µA

60s measuring interval
-10 .. +20s/mth

Lower working voltage limit
<1.20 V



Battery tension
typ 1.5V