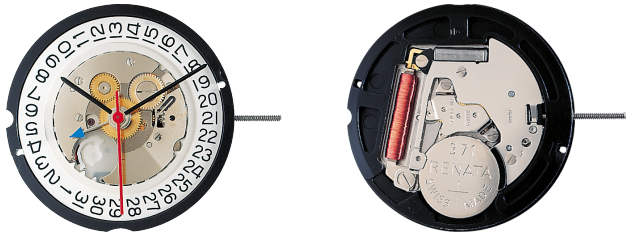
RONDA powertech 500 and 762E, 763E

Affordable metal movements for reliable quality watches

Caliber 515.24H – 11½'''



Product Specifications

Analog quartz movement

Line		powertech
Caliber		515.24H
Size		11½'''
Version	Swiss Made	1 Jewels / nickel plated
	Swiss Parts	1 Jewels / nickel plated
Standard battery life		45 months
Hand fitting height		1

Features

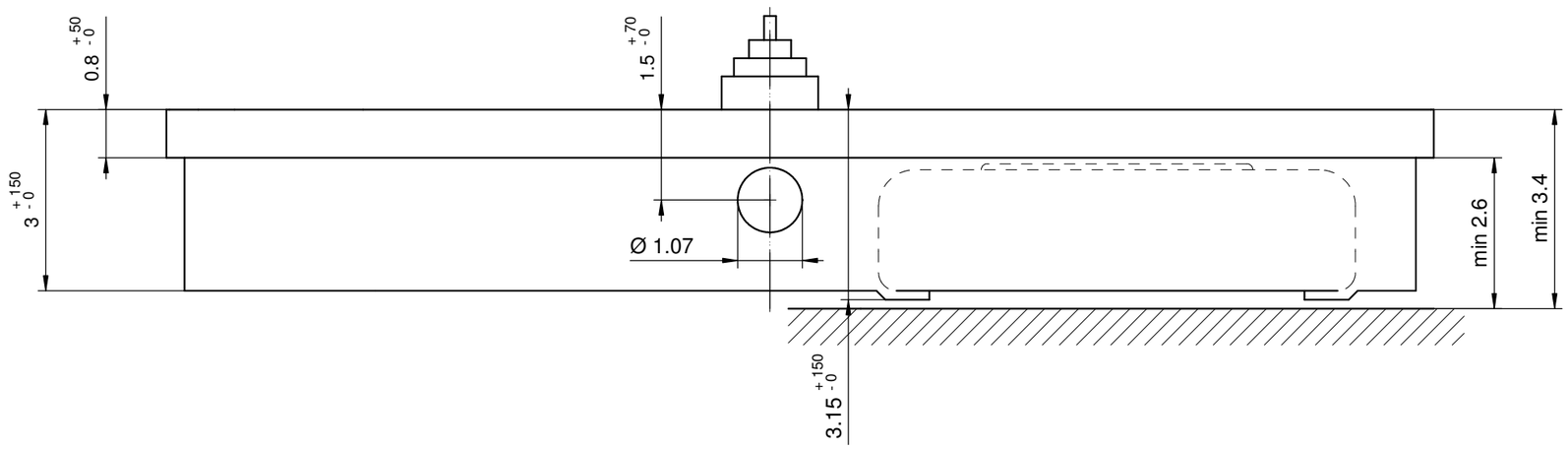
- Repairable metal watch movement
- Power saving mechanism with pullled out stem: Reduction of consumption approximately 70%
- Interchangeability: All versions 11½''' with same movement height 3.00 mm and stem height 1.50 mm
- Very powerful stepping motor
- GMT function with quick change

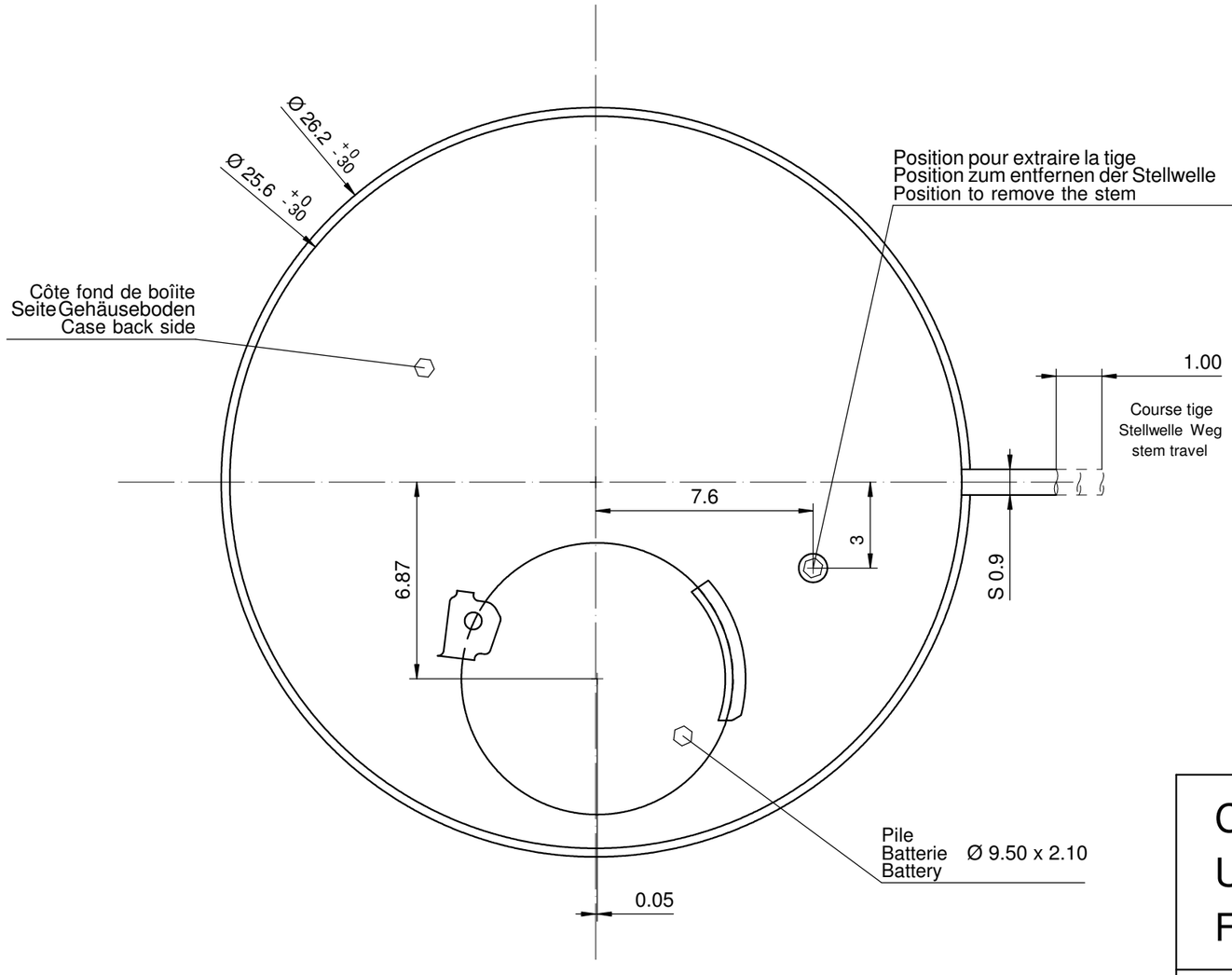
Functions

- Date
- 24 hours by hand – GMT function
- 24 hours
- 3 hands

Technical Specifications

Diameter Total	26.00 mm
Case fitting	25.60 mm
Movement height	3.00 mm
Height over standard battery	3.25 mm
Movement rest	0.80 mm
Height over stem	1.50 mm
Length of stem travel	1.00 mm
Force to push the stem for screwed crown	N
Stem thread	0.90 mm
Standard battery	371
Standard battery life	45 months
Battery voltage	1.5 V
Current consumption – typical	1.28 µA (Date Mechanism not in Gear)
Current consumption – maximum	1.85 µA (Date Mechanism not in Gear)
Useful torque second – typical	11 µNm
Useful torque minute – typical	550 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

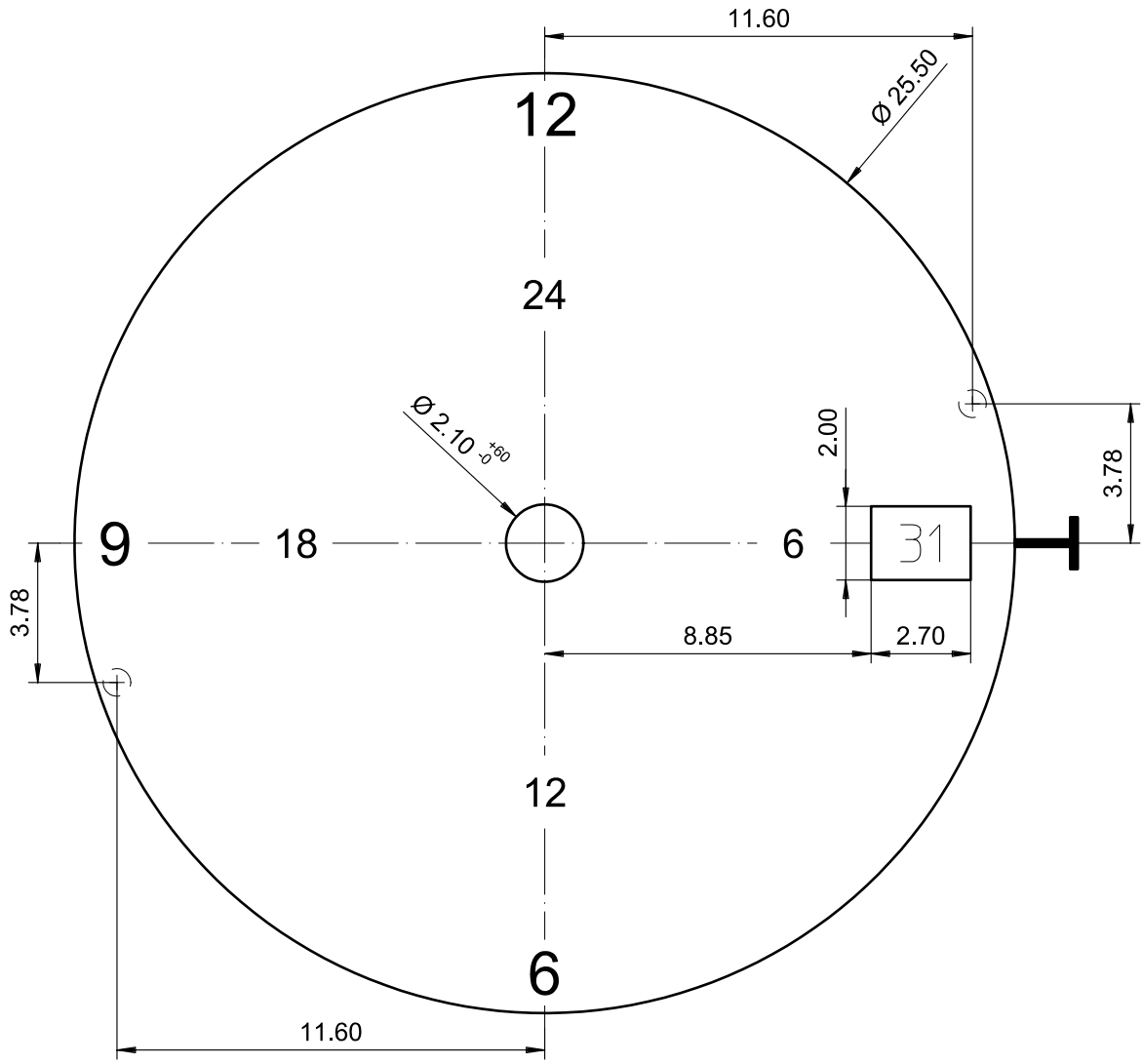


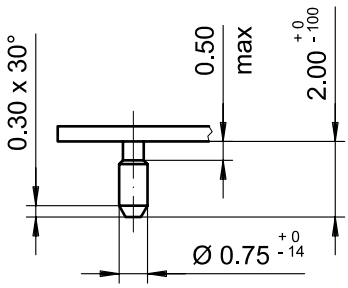


Sécurité entre aiguille seconde et verre : min 0.30 mm
Sicherheit zwischen Sekundenzeiger und Glas : min 0.30 mm
Security between second hand and glass : min 0.30 mm

Le cadran doit être maintenu en hauteur par la boîte.
Das Zifferblatt muss in der Höhe vom Gehäuse festgehalten werden.
The dial must be held in the height by the case.

Cage Uhrwerkgestell Frame	11½'''	Issued	10 Mrz 1999	gd
		Modified	23 Jun 2011 ÄA 11169	dh
		Released	YES	
		Tolerance	+/- 20 µm	
		Scale	10 : 1 (5 : 1) (A3H)	
RONDA	515.24H	Sous réserve de modifications Aenderungen vorbehalten Modifications reserved		
		No.	5000.288	05





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'''

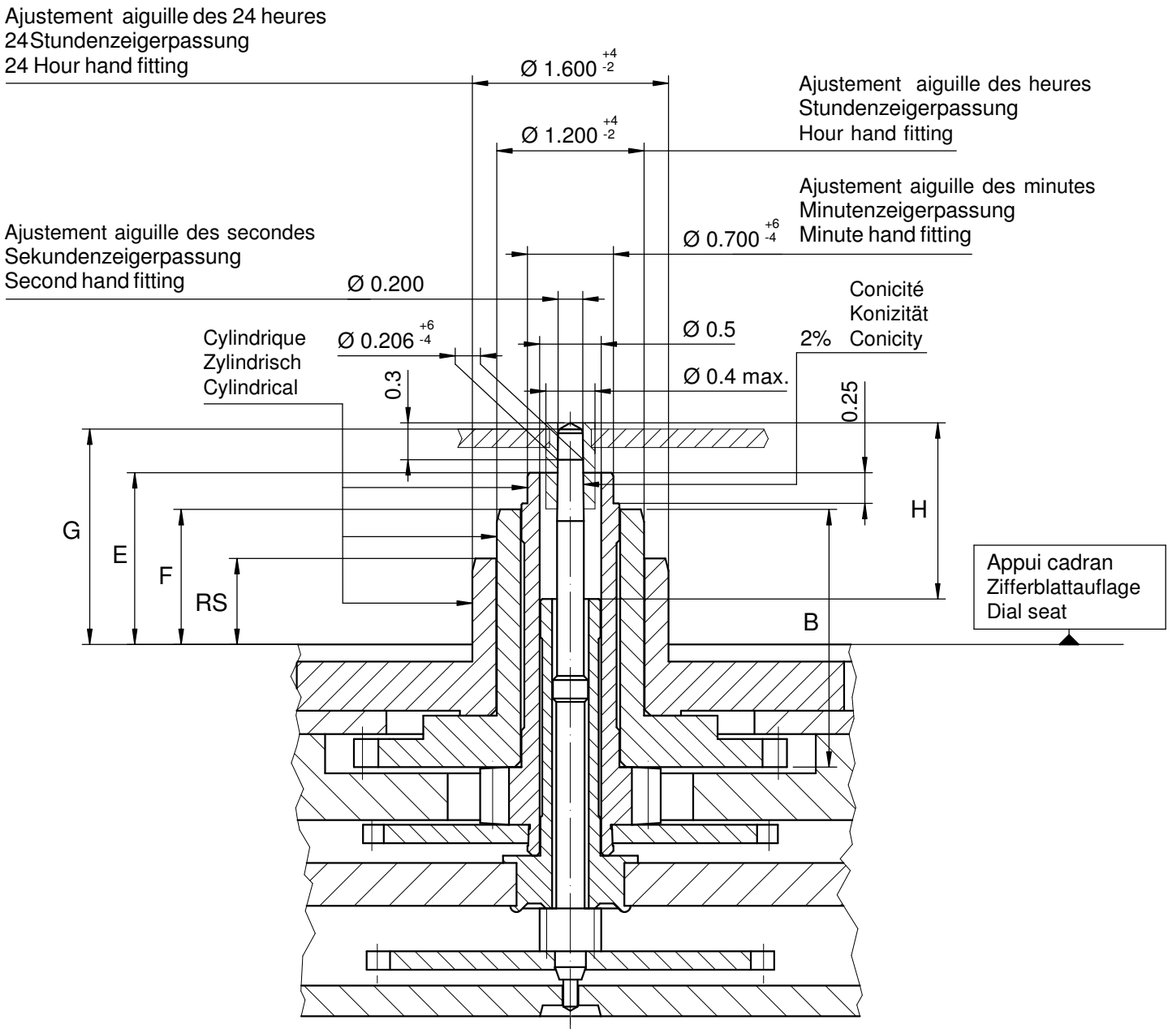
Issued	14 Dez 2006	cw
Modified	15.Mai.2007 ÄA ----	cm
Released	YES	
Tolerance	+/- 20 µm	
Scale	5 : 1 (A4V)	

RONDA

515.24H

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No. 5010.496 02



Heures 24H / Heures / minutes / secondes
Stunden 24H / Stunden / Minuten / Sekunden
Hours 24H / Hours / minutes / seconds

Aiguillage no Zeigerwerkhöhe Nr. Hand fitting height No	Dépassement Höhe über Zifferblattauflage Height over dial seat				Longueur Länge Length		Epaisseur max. (peinture comprise) Max. Dicke (inkl. Farbe) Max. thickness (paint included)				
							Cadran Zifferblatt Dial				Aiguilles Zeiger Hands
	Pignon des secondes Sekundentrieb Second pinion	Chaussée Minutenrohr Cannon-pinion	Roue des heures Stundenrad Hour wheel	Roue des heures 24H Stundenrad 24H Hour wheel 24H		Roue des heures Stundenrad Hour wheel	Sous l'aiguille des secondes Unter Sekundenzeiger Under second hand	Sous l'aiguille des minutes Unter Minutenzeiger Under minute hand	Sous l'aiguille des heures Unter Stundenzeiger Under hour hand	Sous l'aiguille des heures 24H Unter Stundenzeiger 24H Under hour hand 24H	
	G	E	F	RS	H	B					
1	1.80	1.40	1.10	0.70	1.44	2.10	1.30	1.00	0.70	0.40	0.15
2	2.15	1.75	1.45	1.05	1.79	2.45	1.65	1.35	1.05	0.75	0.15

	Aig. des secondes Sekundenzeiger Second hand	Aig. des minutes Minutenzeiger Minute hand	Aig. des heures Stundenzeiger Hour hand	Lors de la pose d'aiguilles, le mouvement doit être soutenu. Beim Zeigersetzen muss das Werk abgestützt werden. The movement needs to be supported for hand setting.
mg max.	10	30	30	Masse / Masse / Weight *
µNm max.	0.08	0.70	0.70	Balourd / Unwucht / Unbalance *
gmm^2 max.	0.4	-	-	Inertie / Massenträgheit / Inertia *
N max.	30	40	40	Force de chassage / Aufpresskraft / Force

Sous réserve de toutes modifications Aenderungen vorbehalten All modifications reserved

Aiguillages
Zeigerwerkhöhen
Hand fitting heights

10½‴, 11½‴

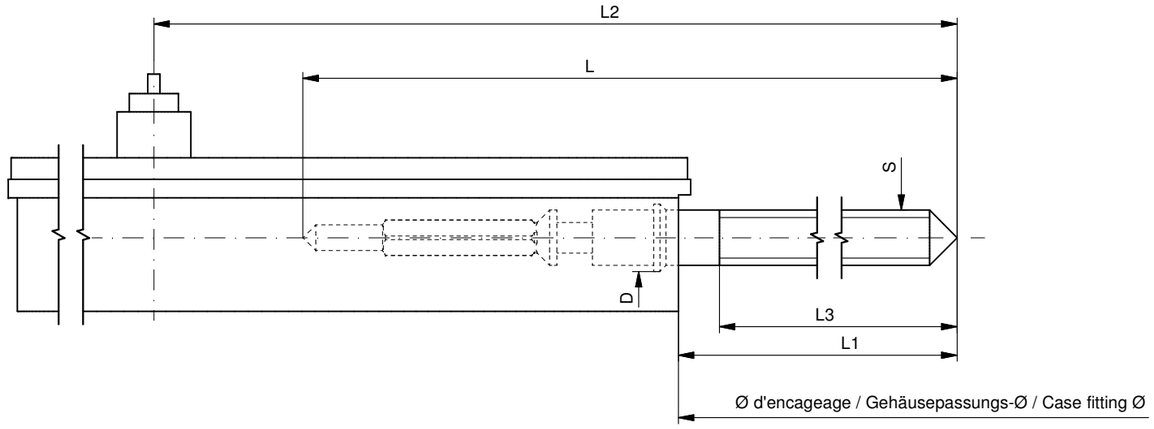
RONDA | 505.24H, 515.24H

Issued	10 Mär 1999	gd
Modified	17 Feb 2011 ÄA 10340	ps
Released	Yes	
Tolerance	µm	
Scale	20 : 1 (A3H)	

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

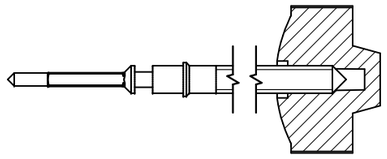
No. 3316.061 07

* 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)

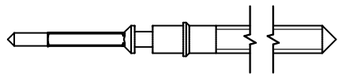
No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.164.CO	20.50	9.92	22.72	11.83	0.90	1.05



Couleur de la couronne Kronenfarbe Crown color	brun braun brown
Code	UN 8052

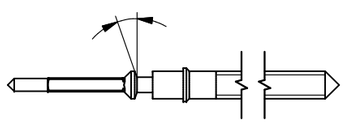
Tige (normale) / Stellwelle (normal) / Stem (normal)

No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.164	20.50	9.92	22.72	11.83	0.90	1.05
3000.171	32.50	21.92	34.72	23.83	0.90	1.05



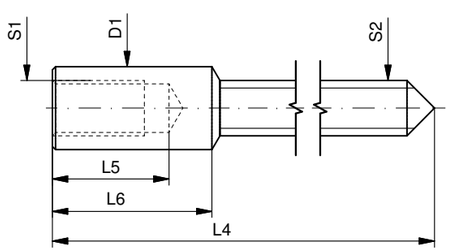
Tige (à arracher)
Stellwelle (Ausreissversion)
Stem (extractable version)

No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.163	20.05	9.92	22.72	11.83	0.90	1.05
3000.196	32.50	21.92	34.72	23.83	0.90	1.05

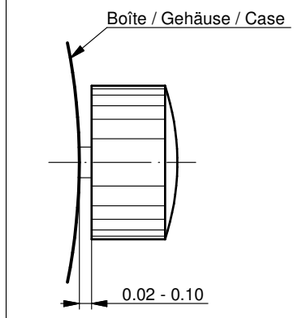


Rallonge de tige / Stellwelle Verlängerung / Stem extension

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



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

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

RONDA

512, 513, 513S, 515, 515S,
515.24H, 515.24D, 517, 519

Issued	15 Aug 2012	ds5222
Modified	17 Mär 2017 ÄA 34582	mg5224
Released	YES	
Tolerance	---	
Scale	10:1 (A3)	

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No.	5030.002	01

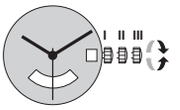
User's Manual English
Movements Caliber

RONDA powertech

– 505.24D / 515.24D
– 505.24H / 515.24H
– 507 / 517
– 509 / 519

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. 505.24D / 515.24D

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.

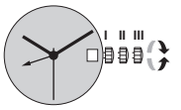
– Pull the crown out to position II (watch still running).
– Turn the crown clockwise until the required date appears.
– Push the crown back into position I.

Quick-change correction for 24-hour display

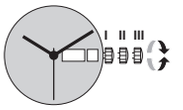
– Pull the crown out to position II (watch still running).
– Turn the crown anticlockwise until the desired time appears.
– Push the crown back into position I.

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. 505.24H / 515.24H



Cal. 507 / 517

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.

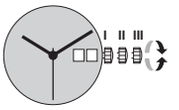
– Pull the crown out to position II (watch still running).
– Turn the crown until the required date appears.
– Push the crown back into position I.

Quick-change correction for day of the week

The blocking time for the day of the week quick-change correction is from approx. 10 pm and midnight.

– The second language always first appears around 24.00hrs for about 2 hours, until the display changes to the required language.
– Pull the crown out to position II (watch still running).
– Turn crown anticlockwise until the desired day of the week appears in the required language.
– Push the crown back into position.

→



Cal. 507 / 517

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. 509 / 519

Pos. I **Position of rest** (watch running)

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

The date display comprises a 2-disc system. For construction reasons, on the first day of a new month, the date must be set on 01 via the quick-change method passing through 31–39.

The date can also be changed during the day-changing phase between approx. 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.
- 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.

Applies to all calibers:
Battery type: 371 / SR920SW

Precision: +20 / -10 seconds per month

CE

09 / 2017

RONDA AG
Hauptstrasse 10
CH-4415 Lausen/Switzerland
Phone ++41 (0)61 926 50 00
www.ronda.ch • info@ronda.ch

Technische Anleitung
Instructions techniques
Technical Instructions
515.24H/515.24D

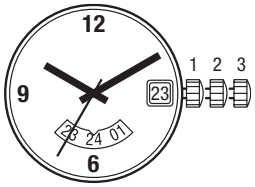
11 ½‴

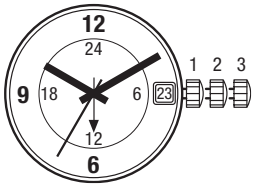
515.24D

515.24H

Funktionen — Fonctions — Functions

Kaliber Calibre Caliber	Stellwellenpos. Pos. de tige Stem position	Funktionen Fonctions Functions
515.24	1	Normale Position / Position normale / Running position
	2	Datumkorrektur / 24-Stundenkorrektur Correction de la date / Correction 24 heures Date correction / 24 hours correction
	3	Zeiger stellen, Sekunden-Stopp mit Unterbruch der Motorimpulse Mise à l'heure, stop-seconde avec interruption des impulsions moteur Hand setting, stop-second with interruption of motor pulses



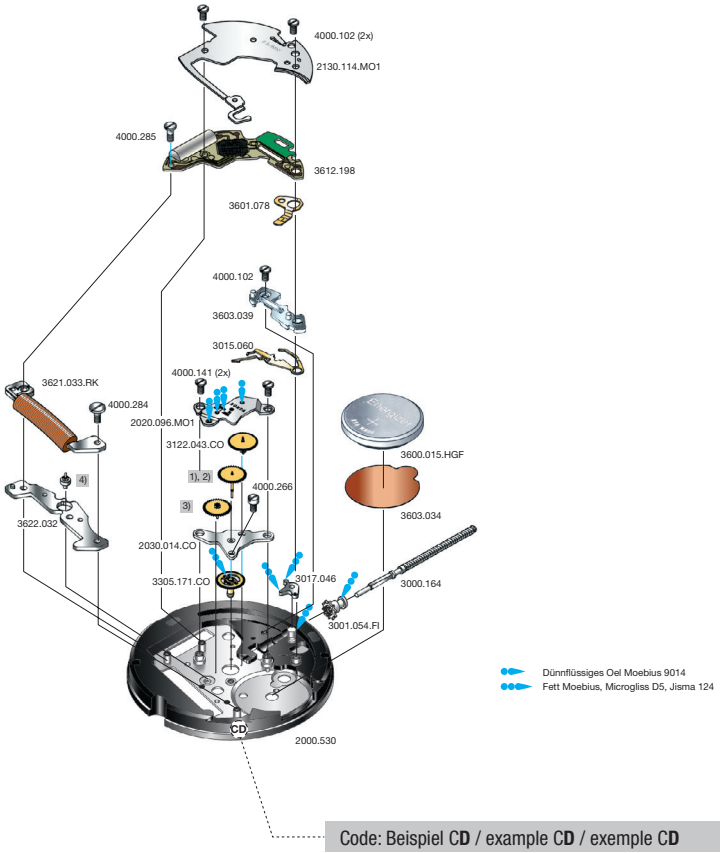


Batterie — Pile — Battery

Kaliber Calibre Caliber	Batterie Pile Battery	Spannung Voltage Tension	Artikelnummer RONDA Numero d'article RONDA Part number RONDA
515.24	371 / SR920SW	1.55 V	3600.015.HGF

Werkaufbau Assemblage Assembling

11½‴ 515.24H, 515.24D



Code: Beispiel C**D** / example C**D** / exemple C**D**

Cal. 515.24D	**Werkseite / Côté mouvement / Movement side**		
Plan No.	**Bestandteile**	**Fournitures**	**Spare Parts**
2000.530	Werkplatte	Platine	Main plate
2020.096.MO1	Räderwerkbrücke	Pont rouage	Train w. bridge
2030.014.CO	Zentrumbrücke	Pont centre	Centre bridge
2130.114.MO1	Modul-Abdeckp.	Couvre module	Module cover pl.
3000.164	Stellwelle	Tige	Stem
3001.054.FI	Kupplungstrieb	Pignon coulant	Sliding pinion
3015.060	Kuppl.-triebhebel	Bascule	Yoke
3017.046	Winkelhebel	Tirette	Setting lever
3122.043.CO	Kleinbodenrad	Roue moyenne	Third wheel
1)	Sekundenrad	Roue secondes	Second-wheel
3)	Zwischenrad	Roue interméd.	Intermed. wheel
3305.171.CO	Minutenrohr	Chaussée	Cannon pinion
3600.015.HGF	Batterie	Pile	Battery
3601.078	Batterie-Kontakt	Bride contact	Battery contact
3603.034	Batterie-Isolation	Isolateur pile	Battery insulation
3603.039	Deckplatte/ Ste.	Couvre mécan.	Setting lev. cover
3612.198	Modul	Module	Module
3621.033.RK	Spule	Bobine	Coil
3622.032	Stator	Stator	Stator
4)	Rotor	Rotor	Rotor
4000.102	Schraube	Vis	Screw
4000.141	Schraube	Vis	Screw
4000.266	Schraube	Vis	Screw
4000.284	Schraube	Vis	Screw
4000.285	Schraube	Vis	Screw

Abweichungen / Divergences / Deviations

Cal. 515.24H	**Werkseite / Côté mouvement / Movement side**		
Plan No.	**Bestandteile**	**Fournitures**	**Spare Parts**
A)	Sekundenrad	Roue secondes	Second-wheel
3305.180.CO	Minutenrohr	Chaussée	Cannon pinion

	Cal. 515.24D	
	Bis Juni 2015 Jusqu' en Juin 2015 Untill June 2015	Ab Juli 2015 A partir de Juillet 2015 From July 2015
Code	2. Buchstabe … **C** Second letter … **C** 2ème chiffre: … **C**	2. Buchstabe: ab **D** Second letter: from **D** 2ème chiffre: à partir de **D**
1)	3136.090.CO	3136.194.CO
3)	3147.019.CO	3147.092.CO
4)	3715.089.RK	3715.144.RK

Die obigen 3 Teile bilden jeweils eine Gruppe. Deshalb sind die 3 Teile jeder Gruppe nicht einzeln gegeneinander austauschbar.

Les 3 fournitures ci-dessous forment un groupe individuel. C'est pourquoi les 3 fournitures de chaque groupe ne sont pas interchangeables.

The 3 parts mentioned above are forming an individual group. Therefore the 3 parts of each group are not interchangeable.

	Cal. 515.24H	
	Bis Juni 2015 Jusqu' en Juin 2015 Untill June 2015	Ab Juli 2015 A partir de Juillet 2015 From July 2015
Code	2. Buchstabe … **C** Second letter … **C** 2ème chiffre: … **C**	2. Buchstabe: ab **D** Second letter: from **D** 2ème chiffre: à partir de **D**
2)	3136.095.CO	3136.218.CO
3)	3147.019.CO	3147.092.CO
4)	3715.089.RK	3715.144.RK

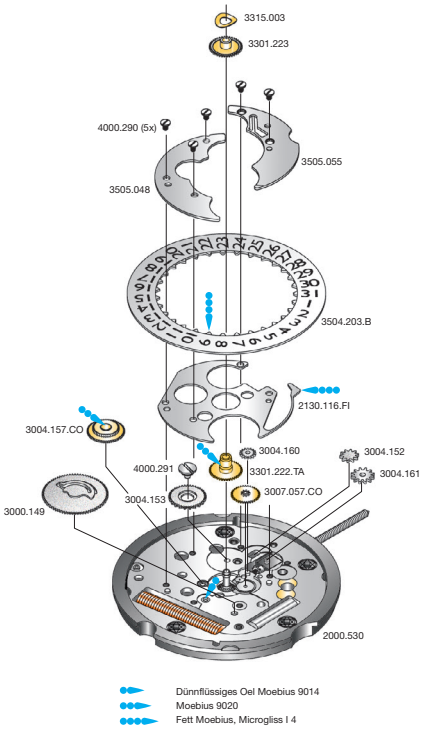
Die obigen 3 Teile bilden jeweils eine Gruppe. Deshalb sind die 3 Teile jeder Gruppe nicht einzeln gegeneinander austauschbar.

Les 3 fournitures ci-dessous forment un groupe individuel. C'est pourquoi les 3 fournitures de chaque groupe ne sont pas interchangeables.

The 3 parts mentioned above are forming an individual group. Therefore the 3 parts of each group are not interchangeable.

Werkaufbau

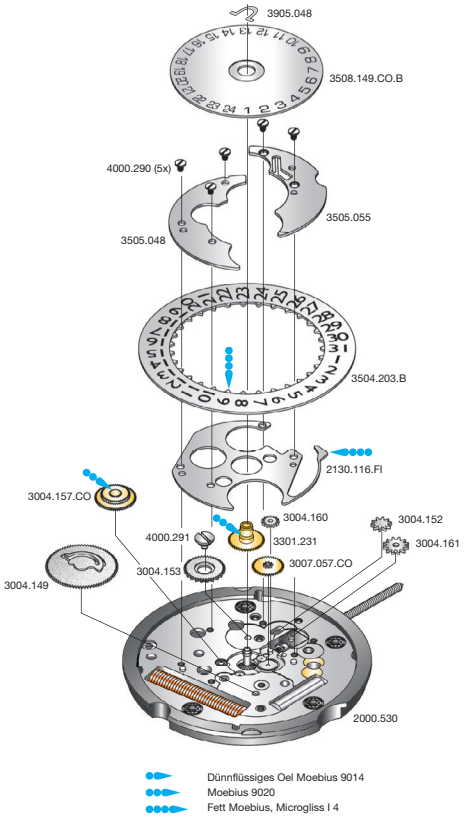
11½‴ 515.24H



Assemblage

Assembling

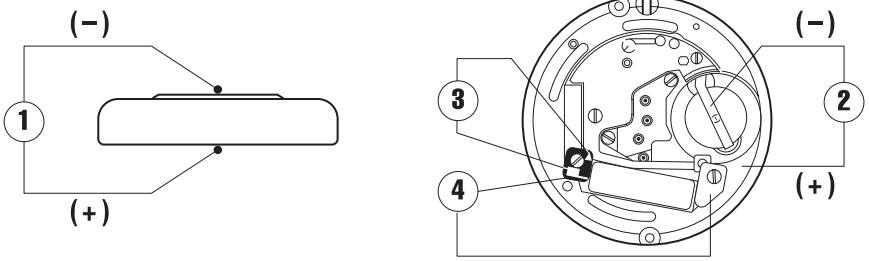
11½‴ 515.24D



Cal. 515.24H	Zifferblattseite / Côté cadran / Dial side		
Plan No.	**Bestandteile**	**Fournitures**	**Spare Parts**
2130.116.FI	Kalenderplatte	Plaque calendrier	Date ind. plate
3004.160	Zeigerstellrad	Renvoi minuterie	Setting wheel
3004.149	Datummitn.-rad	Renvoi entraîn.	Ind. driving wheel
3004.161	Verbindungsrad-Kupplungtrieb	Renvoi pig. coulant	Slid. pin. sett. wh.
3004.152	Umkehrrad	Baladeur	Correction wheel
3004.153	Korrekturrad	Roue correcteur	Correcteur wheel
3004.157.CO	Friktionsrad	Friction	Friction wheel
3007.057.CO	Wechselrad	Minuterie	Minute wheel
3301.222.TA	Stundenrad	Canon	Hour wheel
3301.223	Stundenrad	Canon	Hour wheel
3315.003	Spreizfeder	Clinquant	Washer
3504.203.B	Datumsanzeiger	Baque	Date indicator
3505.055	Kalender-Abdeck-platte (Nr. 2)	Couvercle calendrier (no. 2)	Date indicator cover (no. 2)
3505.048	Kalender-Abdeck-platte (Nr. 1)	Couvercle calendrier (no. 1)	Date indicator cover (no. 1)
4000.290	Schraube	Vis	Screw
4000.291	Schraube	Vis	Screw

Cal. 515.24D	Zifferblattseite / Côté cadran / Dial side		
Plan No.	**Bestandteile**	**Fournitures**	**Spare Parts**
2130.116.FI	Kalenderplatte	Plaque calendrier	Date indicator pl.
3004.160	Zeigerstellrad	Renvoi minuterie	Setting wheel
3004.149	Dat.-Mitn.rad	Renvoi entraîneur	Ind. driving wh.
3004.161	Verbindungsrad-Kupplungtrieb	Renvoi pig. cou.	Sliding pin. set.
3004.152	Umkehrrad	Baladeur	Sliding gear
3004.153	Korrekturrad	Roue corr. disque	Correcteur wheel
3004.157.CO	Friktionsrad	Friction	Friction wheel
3007.057.CO	Wechselrad	Minuterie	Minute wheel
3301.231.TA	Stundenrad	Canon	Hour wheel
3504.203.B	Datumanzeiger	Baque	Date indicator
3505.048	Kalender- Abdeck-platte (Nr. 1)	Couvercle calendrier (no. 1)	Date indicaor cover (no. 1)
3505.055	Kalender- Abdeck-platte (Nr. 2)	Couvercle calendrier (no. 2)	Date indicaor cover (no. 2)
3508.149.CO.B	24 Std.-Scheibe	Disque 24 h	24 h indicator
3905.048	Klemmfeder für Tagesscheibe	Clavett disque	Disc spring clip
4000.290	Schraube	Vis	Screw
4000.291	Schraube	Vis	Screw

Elektr. Messungen — Contrôles électriques — Electrical checking



Kaliber Calibre Caliber	Pos. Pos. Pos.	Einheit Unité Unit	Messwerte Valeurs mesurées Measured values	Kontrolle Contrôle Check	Bemerkungen Remarques Remarks
				Batterie-Spannung	Batterie herausnehmen und messen
515.24H	1	V	1,55	Tension de la pile	Enlever et mesurer la pile
515.24D				Battery voltage	Remove battery for measuring
				Stromaufnahme	Ohne Batterie, mit externer Speisung
515.24H	2	µA	1,10–1,85	Consom. de courant	Sans pile, avec alimentation externe
515.24D				Power consumption	Without battery, with external power supply
				Funktionskontrolle bei Minimalspannung	Ohne Batterie, mit externer Speisung
515.24H	2	V	≤ 1,30	Contrôle de fonctionnement à tension minimale	Sans pile, avec alimentation externe
515.24D				Check with lowest possible voltage	Without battery, with external power supply
				Spulenwiderstand	Ohne Batterie
515.24H	3	KΩ	1,90–2,10	Résistance de la bobine	Sans pile
515.24D				Resistance of the coil	Without battery
				Spulenisolation	Ohne Batterie
515.24H	4	KΩ	∞	Isolation de la bobine	Sans pile
515.24D				Coil insulation	Without battery
515.24H		Sek./Monat		Induktivsonde 60 Sek.	Mit Batterie
515.24D		sec./mois	- 10/+ 20	Senseur inductif 60 sec.	Avec pile
		sec./month		Inductive sensor 60 sec.	With battery

Einschalen / Werkzeuge — Emboîtage / outils — Casing / tools

Nr. H 51X.1A

Nr. H 51X.1T

	SWISS MADE & SWISS PARTS
Schraube **Vis** **Screw**	

Zeigersetzen
Maximale Aufpresskraft:
– Stunden und Minutenzeiger: max. 40N
– Sekundenzeiger: max. 30N

Beim Zeigersetzen muss das Werk abgestützt werden.

Poser les aiguilles
Force de chassage maximale:
– Aiguilles des heure et des minutes: max. 40N
– Aiguille des secondes: max. 30N

Lors de la pose d'aiguilles, le mouvement doit être soutenu.

Hand setting
Maximal force:
– Hour and minute hands: max. 40N
– Second hand: max. 30N

The movement needs to be supported for hand setting.

Kal. 515.24H, 515.24D
Stellwelle entfernen

Beim Entfernen der Stellwelle muss sich die Stellwelle in **Position 2** befinden, bevor auf den Winkelhebel gedrückt wird.

Cal. 515.24H, 515.24D
Enlever la tige

En enlevant la tige, la tige doit se trouver en **position 2**, avant de pousser sur la tirette.

Cal. 515.24H, 515.24D
Stem removal

For removal of the stem, the stem must be in **position 2** prior to apply pressure to the setting lever.