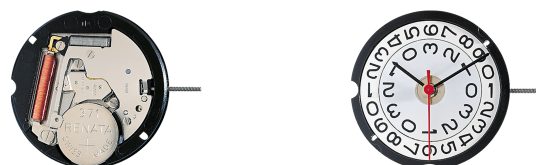


RONDA powertech 500 and 762E, 763E

Affordable metal movements
for reliable quality watches

Caliber 509 – 10½'''



Product Specifications

Analog quartz movement

Line powertech

Caliber 509

Size 10½'''

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 pulled out stem: Reduction of consumption approximately 70%
- Interchangeability: All versions 10½''' with same movement height 3.00 mm and stem height 1.50 mm
- Very powerful stepping motor
- Big date with quick change

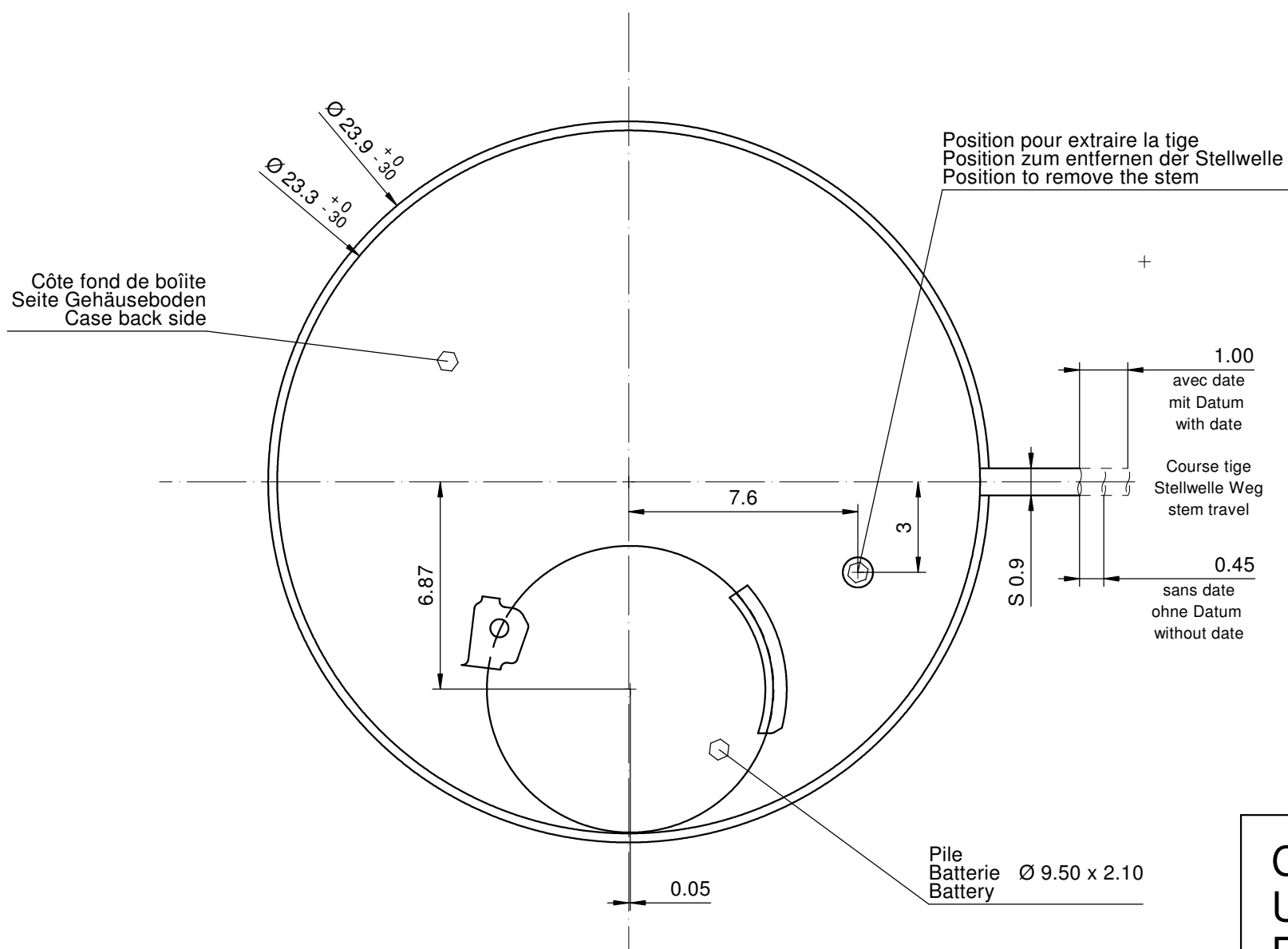
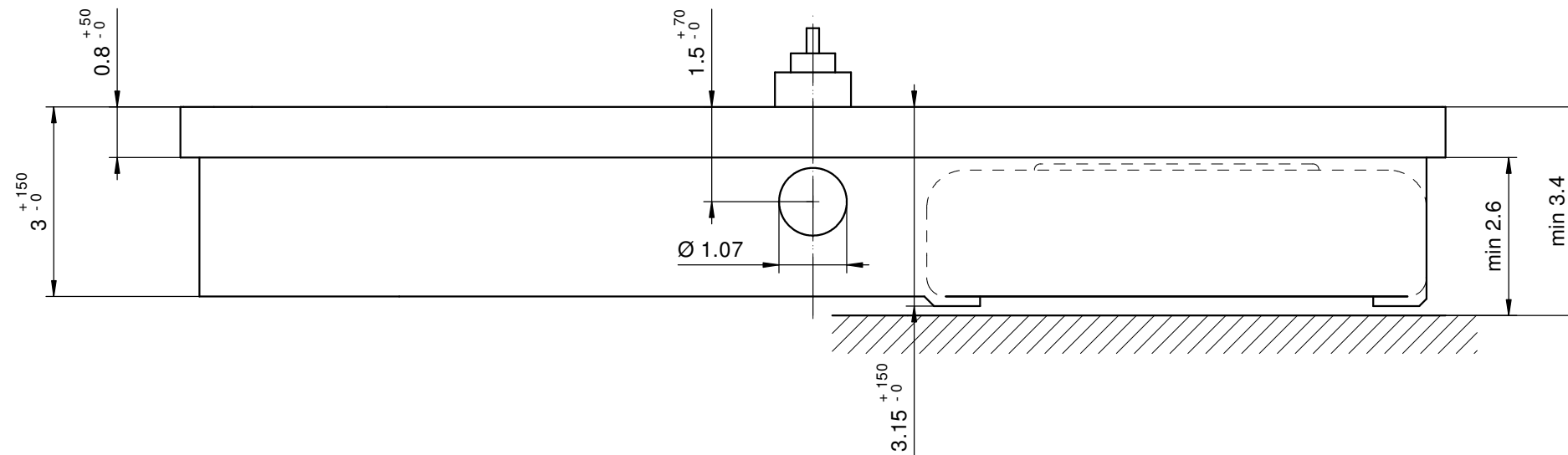
Functions

- Big date without direct change from 31–01
- 3 hands

Technical Specifications

Diameter Total	23.90 mm
Case fitting	23.30 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
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





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

1.00
 avec date
 mit Datum
 with date

Course tige
 Stellwelle Weg
 stem travel

0.45
 sans date
 ohne Datum
 without date

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 10½"
Frame

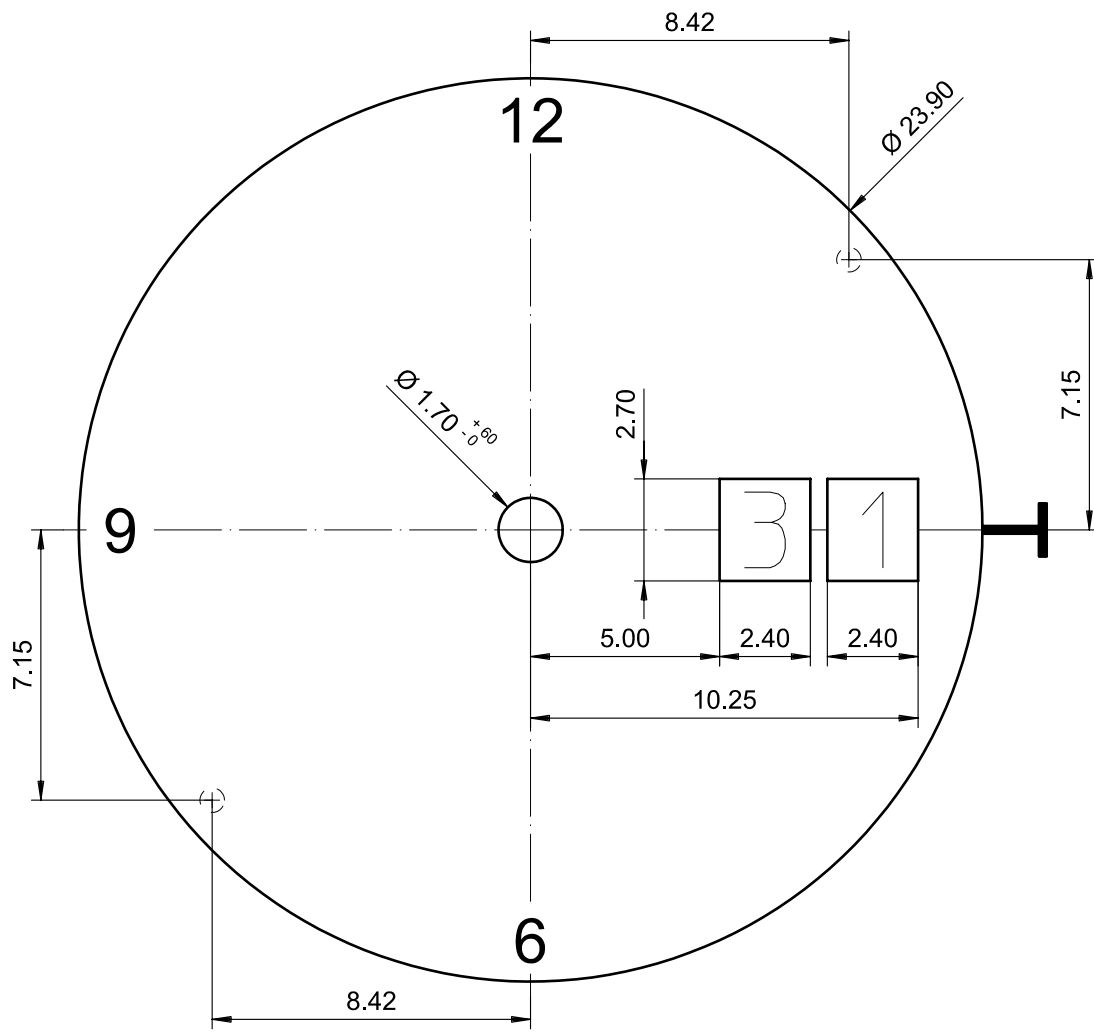
RONDA

502, 503, 503S, 505,
505S, 507, 509

Issued	09.02.2000	cs
Modified	16.11.2017	dh5221
Released	YES	
Mod. No.	36881	
Tolerance	±20 µm	
Scale	10 : 1	Page 1/1 A3

Sous réserve de modifications
 Aenderungen vorbehalten
 Modifications reserved

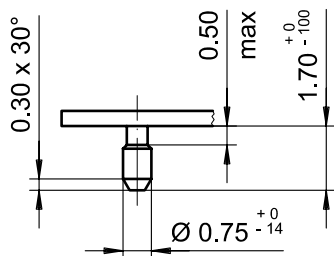
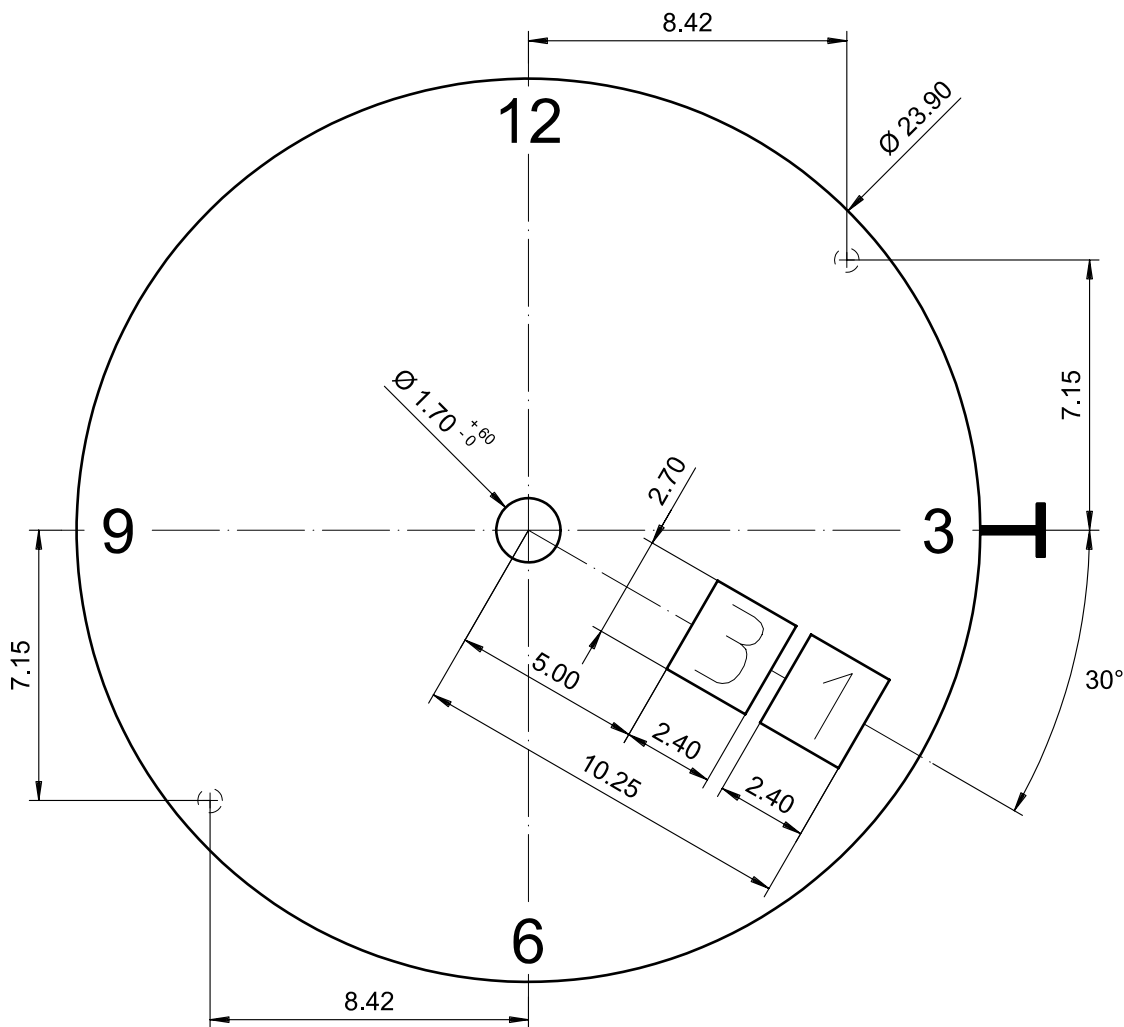
No.	5000.284	07
-----	----------	----



Tige	Date
Stellw.	Datum
Stem	Date
3H	3H
	<input type="checkbox"/>

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

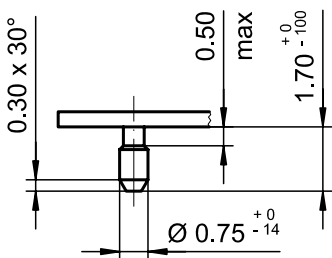
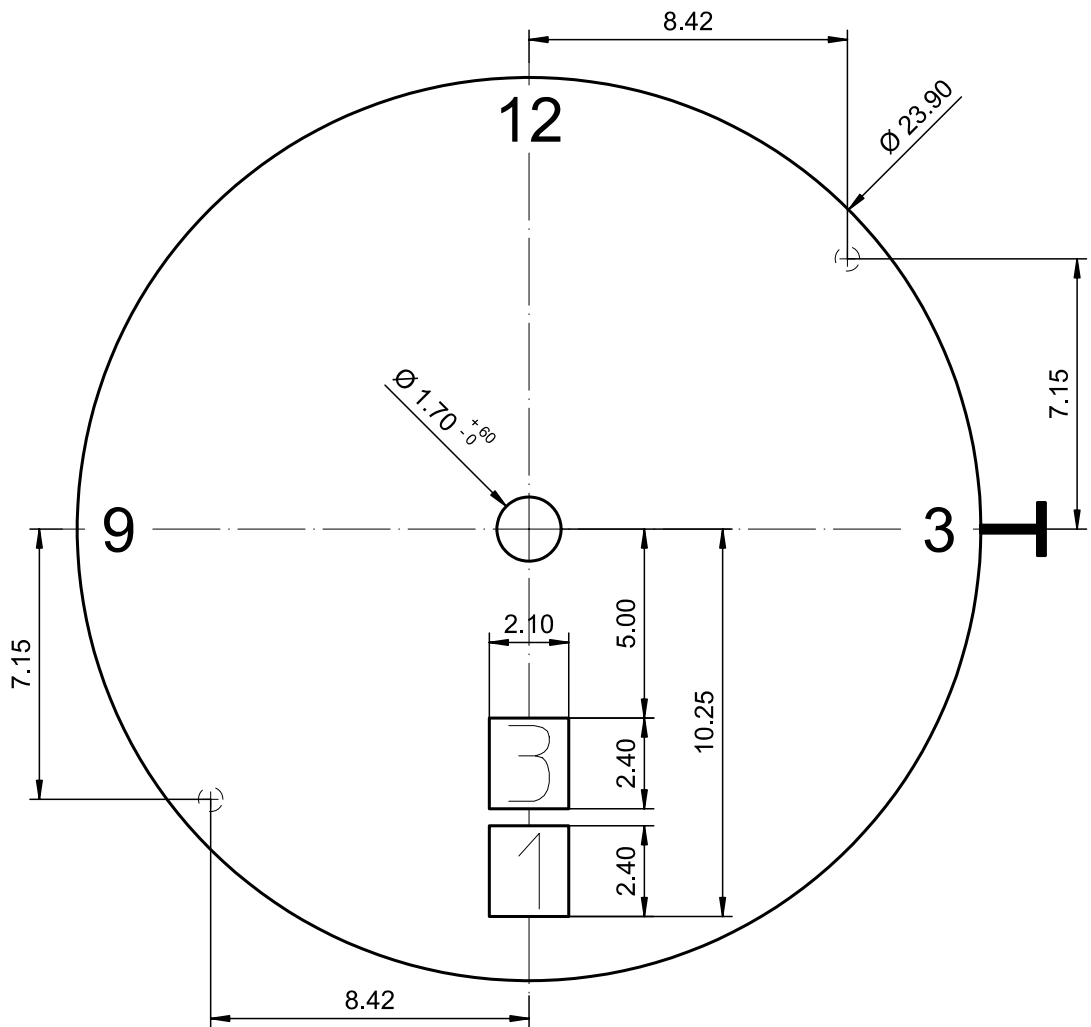
Cadran Zifferblatt Dial	10½"	Issued	14 Dez 2006	cw
		Modified	15.Dez. 2006 ÄA ----	cw
		Released	YES	
		Tolerance	+/- 20 µm	
		Scale	5 : 1 (A4V)	
RONDA	509	Sous réserve de modifications Änderungen vorbehalten Modifications reserved		
		No.	5010.487	01



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	4H
□	

Cadran Zifferblatt Dial	$10\frac{1}{2}''$	Issued	14 Dez 2006	cw
		Modified	12.Dez. 2006 ÄA ----	cw
		Released	YES	
		Tolerance	+/- 20 µm	
		Scale	5 : 1 (A4V)	
RONDA	509	Sous réserve de modifications Aenderungen vorbehalten Modifications reserved		
		No.	5010.505	01

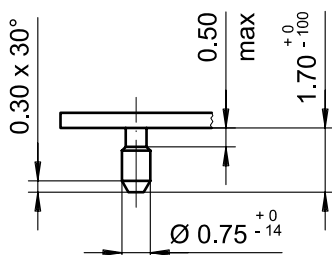
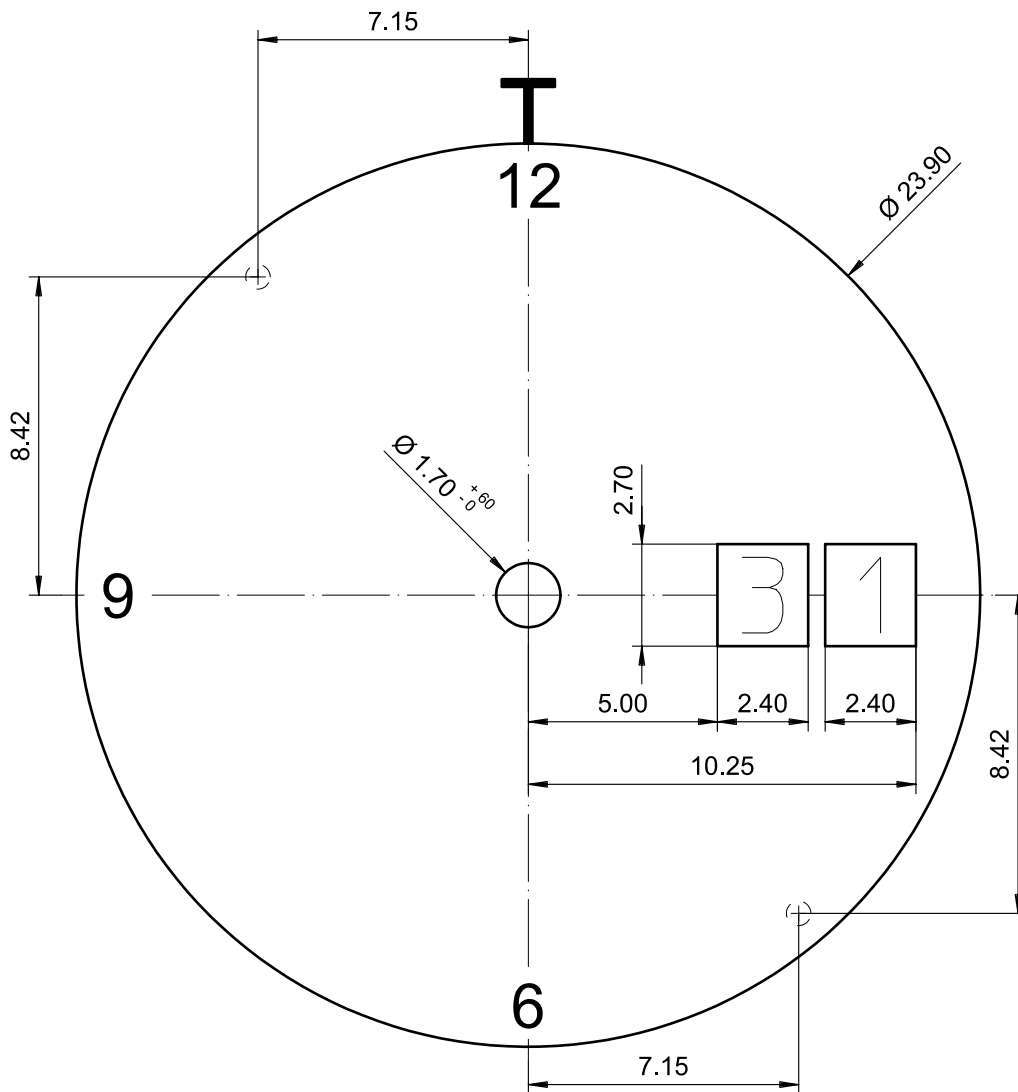


Epaisseur du cadran selon hauteur de l'aiguillage
 Zifferblattdicke gemäss Zeigerwerkhöhen
 Dial thickness according to hand fitting heights

Tige	Date
Stellw.	Datum
Stem	Date
3H	6H
□	

Cadran Zifferblatt Dial	10½"	Issued	14 Dez 2006	cw
		Modified	15.Dez. 2006 ÄÄ ----	cw
		Released	YES	
		Tolerance	+/- 20 µm	
		Scale	5 : 1 (A4V)	

RONDA	509	Sous réserve de modifications Änderungen vorbehalten Modifications reserved		
		No.	5010.506	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
12H	3H

Cadran
 Zifferblatt
 Dial

10 1/2'''

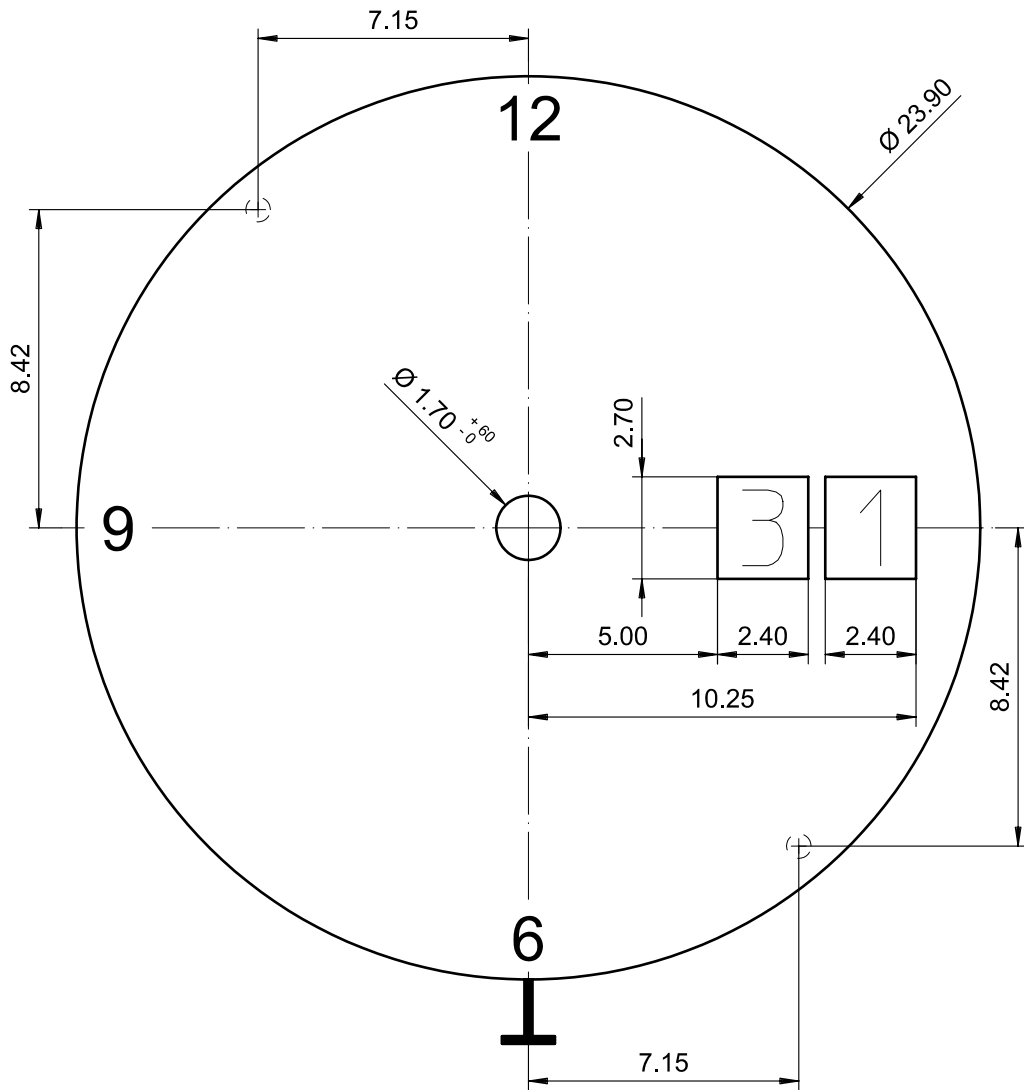
Issued	14 Dez 2006	cw
Modified	15.Dez.2006 ÄA ----	cw
Released	YES	
Tolerance	+/- 20 µm	
Scale	5 : 1 (A4V)	

RONDA

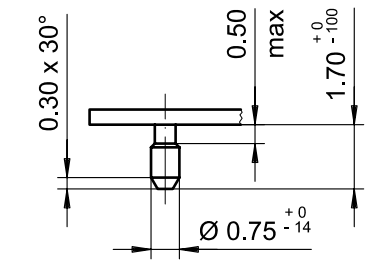
509

Sous réserve de modifications
 Aenderungen vorbehalten
 Modifications reserved

No. 5010.529 01

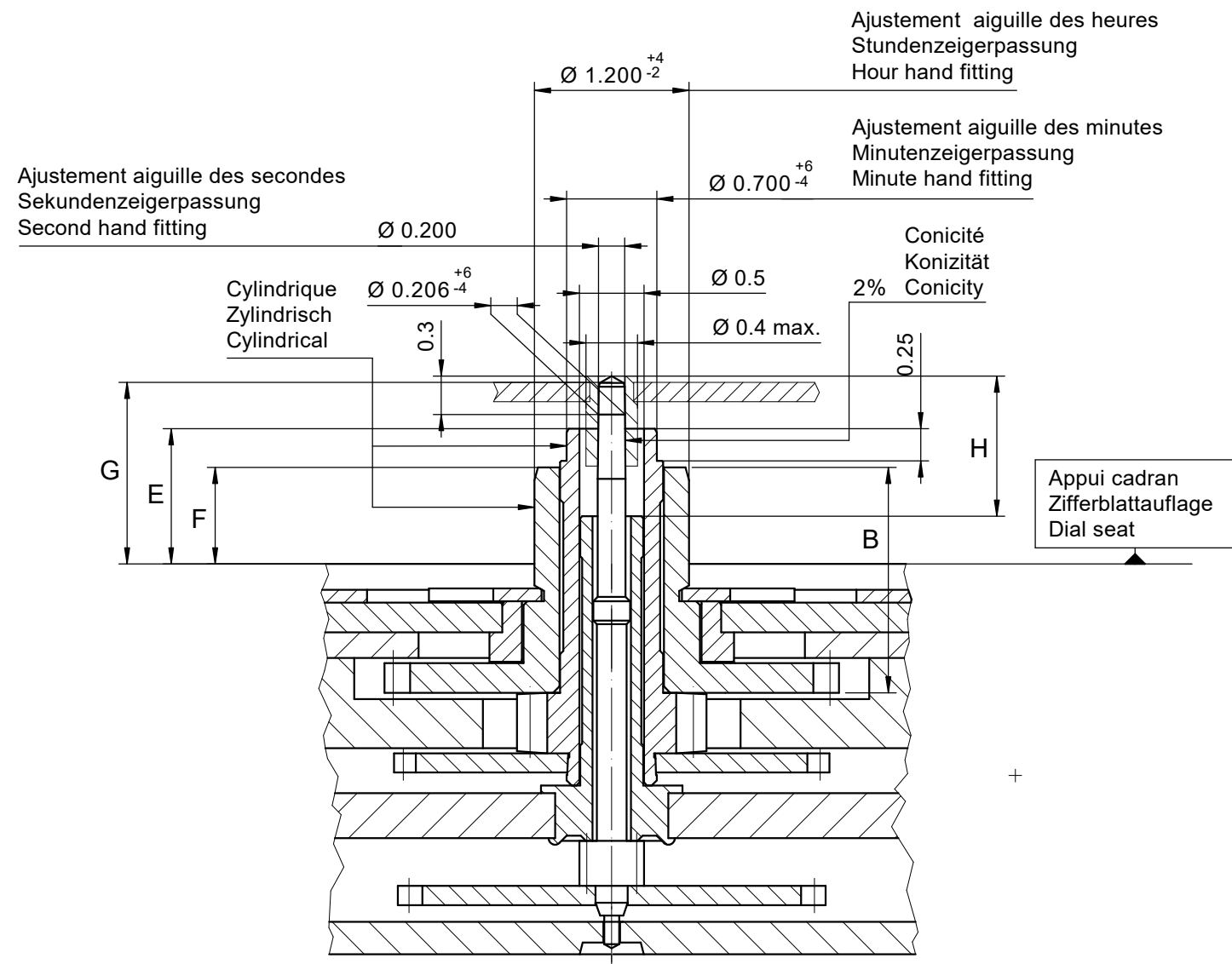


Tige	Date
Stellw.	Datum
Stem	Date
6H	3H
□	



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

Cadran Zifferblatt Dial	10 1/2"	Issued	14 Dez 2006	cw
		Modified	15.Dez.2006 ÄA ----	cw
		Released	YES	
		Tolerance	+/- 20 µm	
		Scale	5 : 1 (A4V)	
RONDA	509	Sous réserve de modifications Änderungen vorbehalten Modifications reserved		
		No.	5010.586	01



Heures / minutes / secondes
 Stunden / Minuten / Sekunden
 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)			
	Pignon des secondes Sekundentrieb Second pinion	Chaussée Minutenrohr Cannon-pinion	Roue des heures Stundenrad Hour wheel	Cadran Zifferblatt Dial			Aiguilles Zeiger Hands		
				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			
G	E	F	H	B					
1	1.46	1.05	0.75	1.09	1.75	0.95	0.65	0.40	0.15
2	1.81	1.40	1.10	1.44	2.10	1.30	1.00	0.75	0.15

	Aig. des secondes Sekundenzeiger Second hand	Aig. des minutes Minutenzeiger Minute hand	Aig. des heures Stundenzeiger Hour hand	
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

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.

Aiguillages Zeigerwerkhöhen 10½", 11½" Hand fitting heights	Issued	10.03.1999	gd
	Modified	25.02.2022	jk5228
	Released	YES	
	Mod. No.	38099	
	Tolerance	µm	
	Scale	10 : 1	Page 1/1
RONDA 507, 509, 517, 519 505.24D, 515.24D	Sous réserve de modifications Aenderungen vorbehalten Modifications reserved		
	No.	3316.060	08

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

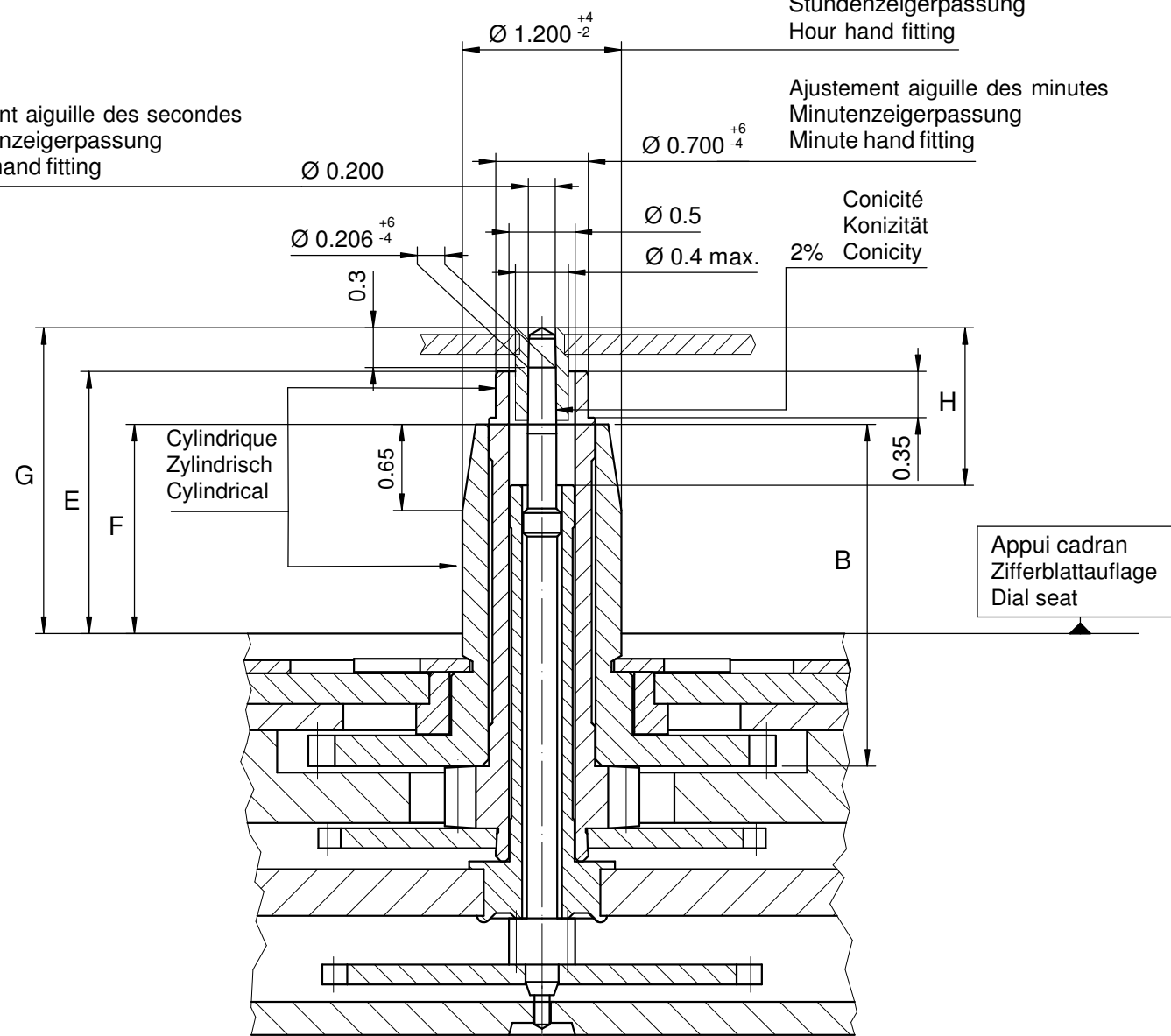
* Bei abweichenden Werten, bitte technischen Kundendienst anfragen

* In case of different values, please contact the customer service

Ajustement aiguille des secondes
Sekundenzeigerpassung
Second hand fitting

Ajustement aiguille des heures
Stundenzeigerpassung
Hour hand fitting

Ajustement aiguille des minutes
Minutenzeigerpassung
Minute hand fitting



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

Aiguillage no ZeigerwerkhöheNr. 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)			
	Pignon des secondes Sekundentrieb Second pinion	Chaussée Minutenrohr Cannon-pinion	Roue des heures Stundenrad Hour wheel		Roue des heures Stundenrad Hour wheel	Cadran Zifferblatt Dial		Aiguilles Zeiger Hands	
	G	E	F	H	B	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	
6	2.31	1.98	1.58	1.19	2.58	1.80	1.55	0.40	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

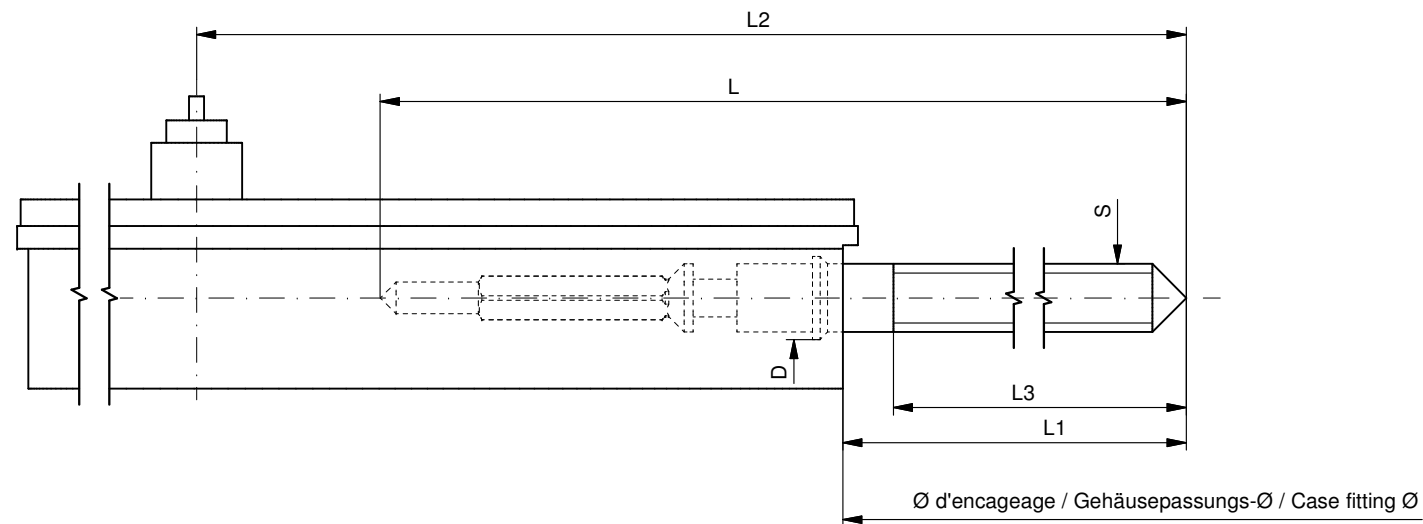
All modifications reserved

Aiguillages Zeigerwerkhöhen Hand fitting heights	10½", 11½"		Issued	23 Mai 2011	dh
			Modified	24 Mai 2011 ÄA 11034	dh
			Released	Yes	
			Tolerance	µm	
			Scale	20 : 1 (A3H)	
RONDA	507, 509, 517, 519 505.24D, 515.24D		Sous réserve de modifications Aenderungen vorbehalten Modifications reserved		
	No.	3316.157			00

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

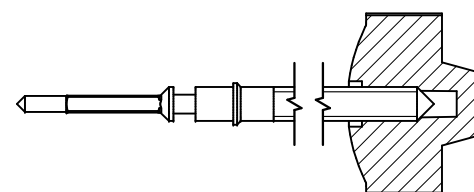
* Bei abweichenden Werten, bitte technischen Kundendienst anfragen

* 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)

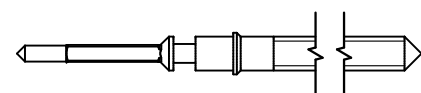
No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.164.CO	20.50	11.09	22.74	11.83	0.90	1.05



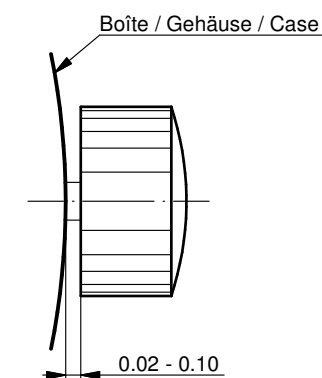
Couleur de la couronne Kronenfarbe Crown color	brun braun brown
Code	UN 8052

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

No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.164	20.50	11.09	22.74	11.83	0.90	1.05
3000.171	32.50	24.34	34.74	23.83	0.90	1.05



Couronne normale
 Normale Krone
 Normal crown

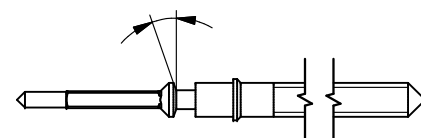


Couronne vissée
 Geschraubte Krone
 Screwed crown

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

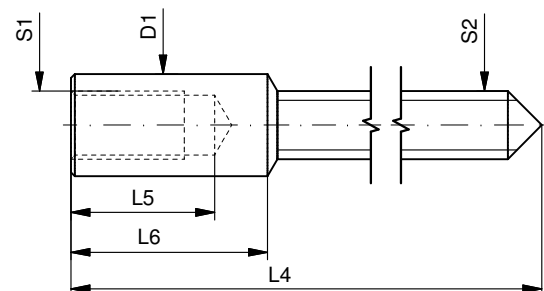
Tige (à arracher)
 Stellwelle (Ausreissversion)
 Stem (extractable version)

No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.163	20.50	12.34	22.74	11.83	0.90	1.05
3000.196	32.50	24.34	34.74	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



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

RONDA

502, 503, 503S, 505, 505S,
 505.24H, 505.24D, 507, 509

Issued	05 Jul 2012	ds5212
Modified	17 Mär 2017 ÄA 34582	mg5224
Released	YES	
Tolerance	---	
Scale	10:1 (A3)	

Sous réserve de modifications
 Änderungen vorbehalten
 Modifications reserved

No.	5030.001	01
-----	----------	----

RONDA powertech

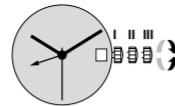
- 505.24D/515.24D
- 505.24H/515.24H
- 507/517
- 509/519

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



Cal. 505.24H / 515.24H

Pos. I Position of rest (watch running)

Pos. II Quick-change correction of the 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.

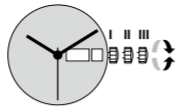
- Pull the crown out to position II (watch still running).
- Turn the crown clockwise until the required date appears.
- Push the crown back into position I.

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. 507 / 517

Pos. I Position of rest (watch running)

Pos. II Quick-change correction of the 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.

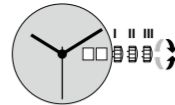
- Pull the crown out to position II (watch still running).
- Turn the crown until the required date appears.
- Push the crown back into position I.

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 of the 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 (Ø 9.5 mm x 2.05 mm)

Accuracy: +20/-10 seconds per month





10 1/2^{mm}



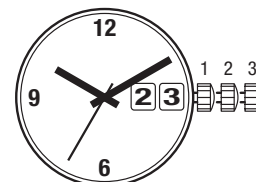
509

Funktionen

Fonctions

Functions

Kaliber	Stellwellenpos.	Funktionen
Calibre	Pos. de tige	Fonctions
Caliber	Stem position	Functions
509	1	Normale Position / Position normale / Running position
	2	Datumkorrektur / Correction de la date / Date 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



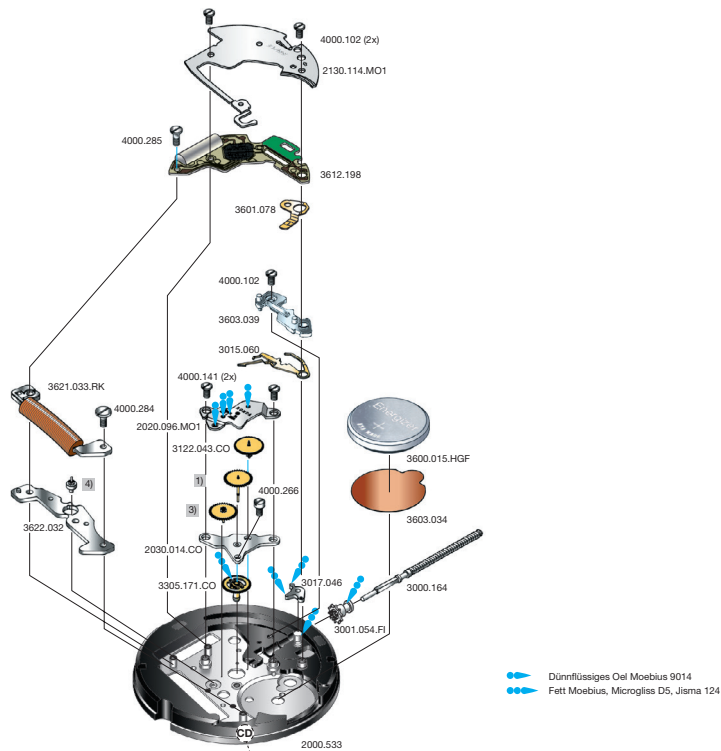
Batterie

Pile

Battery

Kaliber	Batterie	Spannung	Artikelnummer RONDA
Calibre	Pile	Voltage	Numero d'article RONDA
Caliber	Battery	Tension	Part number RONDA
509	371 / SR920SW	1.55 V	3600.015.HGF

10 1/2''' 509



Code: Beispiel CD / exemple CD / exemple CD

Plan No.	Bestandteile	Fournitures	Spare Parts
2000.533	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

Cal.509

Bis Dezember 2015
Jusqu' en Décembre 2015
Untill December 2015

Ab Januar 2016
A partir de Janvier 2016
From January 2016

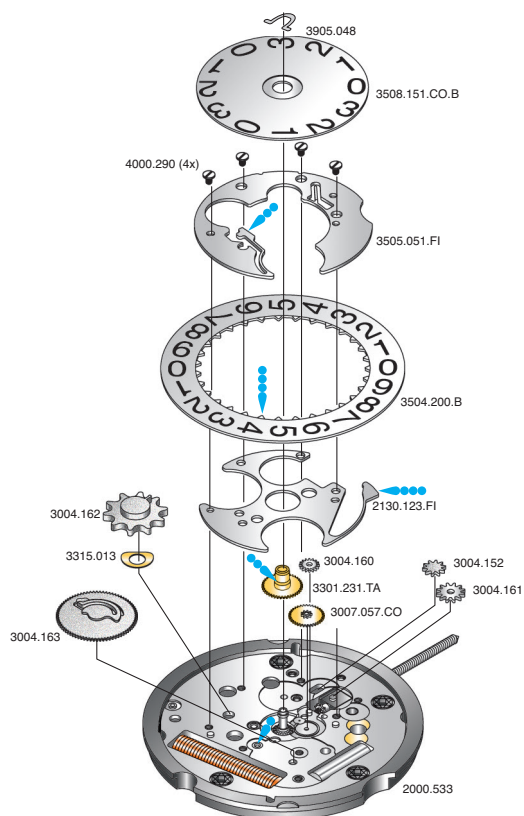
Code	2. Buchstabe ... D Second letter ... D 2 ^{ème} chiffre: ... D	2. Buchstabe: ab E Second letter: from E 2 ^{ème} chiffre: à partir de E
1)	3136.090.CO	3136.194.CO
3)	3147.019.CO	3147.092.CO
4)	3715.089.RK	3715.144.RK

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.

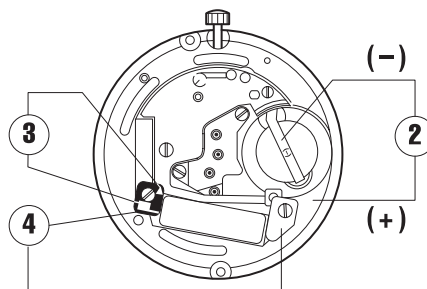
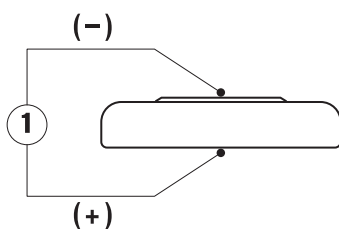
The 3 parts mentioned above are forming an individual group. Therefore the 3 parts of each group are not interchangeable.

10 1/2''' 509



- Dünnflüssiges Öl Moebius 9014
- Moebius 9020
- Fett Moebius, Microgliss 1 4

Cal. 509 Zifferblattseite / Côté cadran / Dial side			
Plan No.	Bestandteile	Fournitures	Spare Parts
2130.123.FI	Kalenderplatte	Plaque calendrier	Date indicator pl.
3004.152	Umkehrad	Baladeur	Sliding gear
3004.160	Zeigerstellrad	Renvoi minuterie	setting wheel
3004.161	Verbindungsrad- Kupplungtrieb	Renvoi pig. cou.	Sliding pin. set.
3004.162	Verbindungsrad Kal.-Ring	Renvoi baque	Sl. wheel dt. ind.
3004.163	Dat.-Mitn.rad	Renvoi entraîneur	Ind. driving wh.
3007.057.CO	Wechselrad	Minuterie	Minute wheel
3301.231.TA	Stundenrad	Canon	Hour wheel
3315.013	Spreizfeder 3°	Clinquant 3°	Washer 3°
3504.200.B	Datumanzeiger	Baque	Date indicator
3505.051.FI	Kal.-Abdeckplatte	Couvercle calend.	Date ind. cover
3508.151.CO.B	Datumscheibe	Disque	Disc
3905.048	Klemmfeder für Tagesscheibe	Clavett disque	Disc spring clip
4000.290	Schraube	Vis	Screw



Kaliber Calibre Caliber	Pos. Pos. Pos.	Einheit Unité Unit	Messwerte Valeurs mesurées Measured values	Kontrolle Contrôle Check	Bemerkungen Remarques Remarks
509	1	V	1,55	Batterie-Spannung Tension de la pile Battery voltage	Batterie herausnehmen und messen Enlever et mesurer la pile Remove battery for measuring
509	2	µA	1,10–1,85 2,20–2,65	Stromaufnahme Consom. de courant Power consumption	Ohne Batterie, mit externer Speisung Sans pile, avec alimentation externe Without battery, with external power supply
509	2	V	≤ 1,30	Funktionskontrolle bei Minimalspannung Contrôle de fonctionnement à tension minimale Check with lowest possible voltage	Ohne Batterie, mit externer Speisung Sans pile, avec alimentation externe Without battery, with external power supply
509	3	KΩ	1,90–2,10	Spulenwiderstand Résistance de la bobine Resistance of the coil	Ohne Batterie Sans pile Without battery
509	4	KΩ	∞	Spulenisolation Isolation de la bobine Coil insulation	Ohne Batterie Sans pile Without battery
509		Sek./Monat sec./mois sec./month	- 10/+ 20	Induktivsonde 60 Sek. Senseur inductif 60 sec. Inductive sensor 60 sec.	Mit Batterie Avec pile With battery

Einschalen / Werkzeuge

Emboîtage / outils

Casing / tools

Nr. H 50X.1A



Nr. H 50X.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. 509 Stellwelle entfernen

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

Cal. 509 Enlever la tige

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

Cal. 509 Stem removal

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