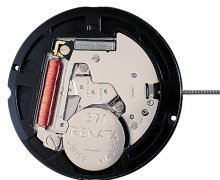
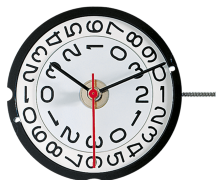


Quartz Movements

经典功能

朗达 强力系列

型号 519 - 11□"



产品规格

指针式石英机芯

系列

强力系列

型号

519

尺寸

11□"

版本 瑞士制造

1 钻石 / 银色

版本 瑞士零件 远东组装

1 钻石 / 银色

电池寿命

45 月

标准针高

1

特点

- 金属机芯，可修理
- 拉停把心省电功能：节省大概70%耗电
- 所有11□" 机芯具相同厚度 3.00 mm 及把中1.50 mm：可共用配件
- 特强步进马达
- 大日历可快调

功能

- 大日历不会由31跳至01，需要每月调校
- 三针

Quartz Movements

经典功能

朗达 强力系列

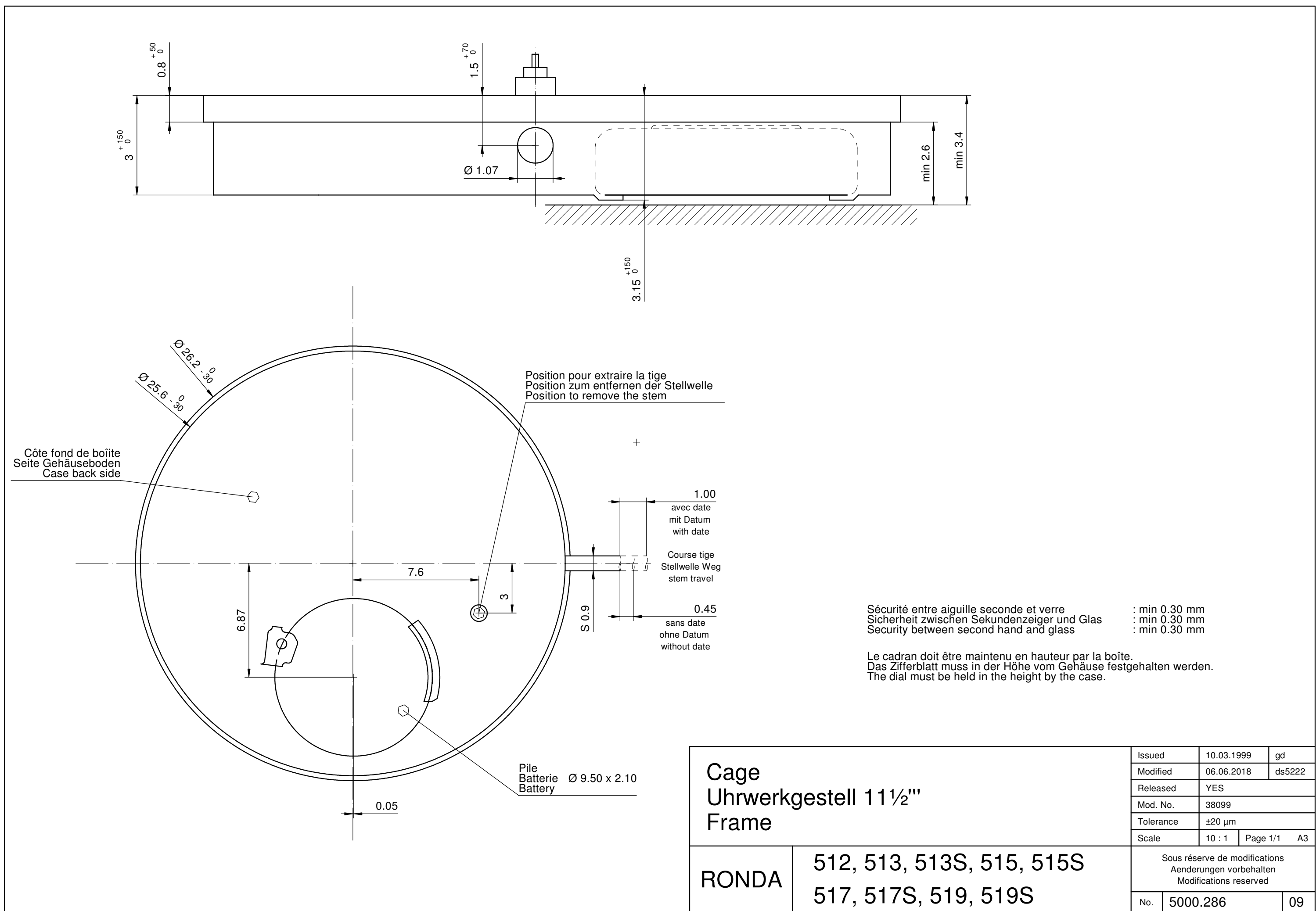
型号 519 - 11□'

技术规格

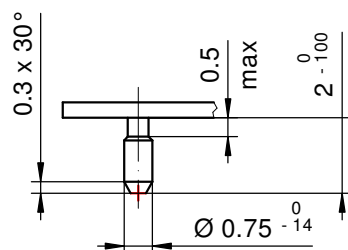
机芯直径	26.00 mm
内罩座位直径	25.60 mm
机芯厚度	3.00 mm
电池以上厚度	3.25 mm
机芯座位	0.80 mm
把中	1.50 mm
把心行程	1.00 mm
把心螺纹直径	0.90 mm
秒针运行扭力 - 一般情况下	11 μ Nm
分针运行扭力 - 一般情况下	550 μ Nm
运作温度	0 - 50 ° C
误差率	-10/ +20 秒/月
防磁度	18.8 Oe
防震度	NIHS 91-10

电池规格

电池类型	型号 371
电池寿命	45 月
电压	1.5 V
电耗 - 一般情况下	1.28 μ A (日历不在跳动当中)
电耗 - 上限	1.85 μ A (日历不在跳动当中)



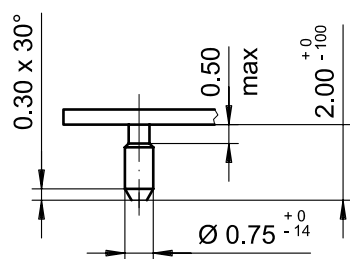
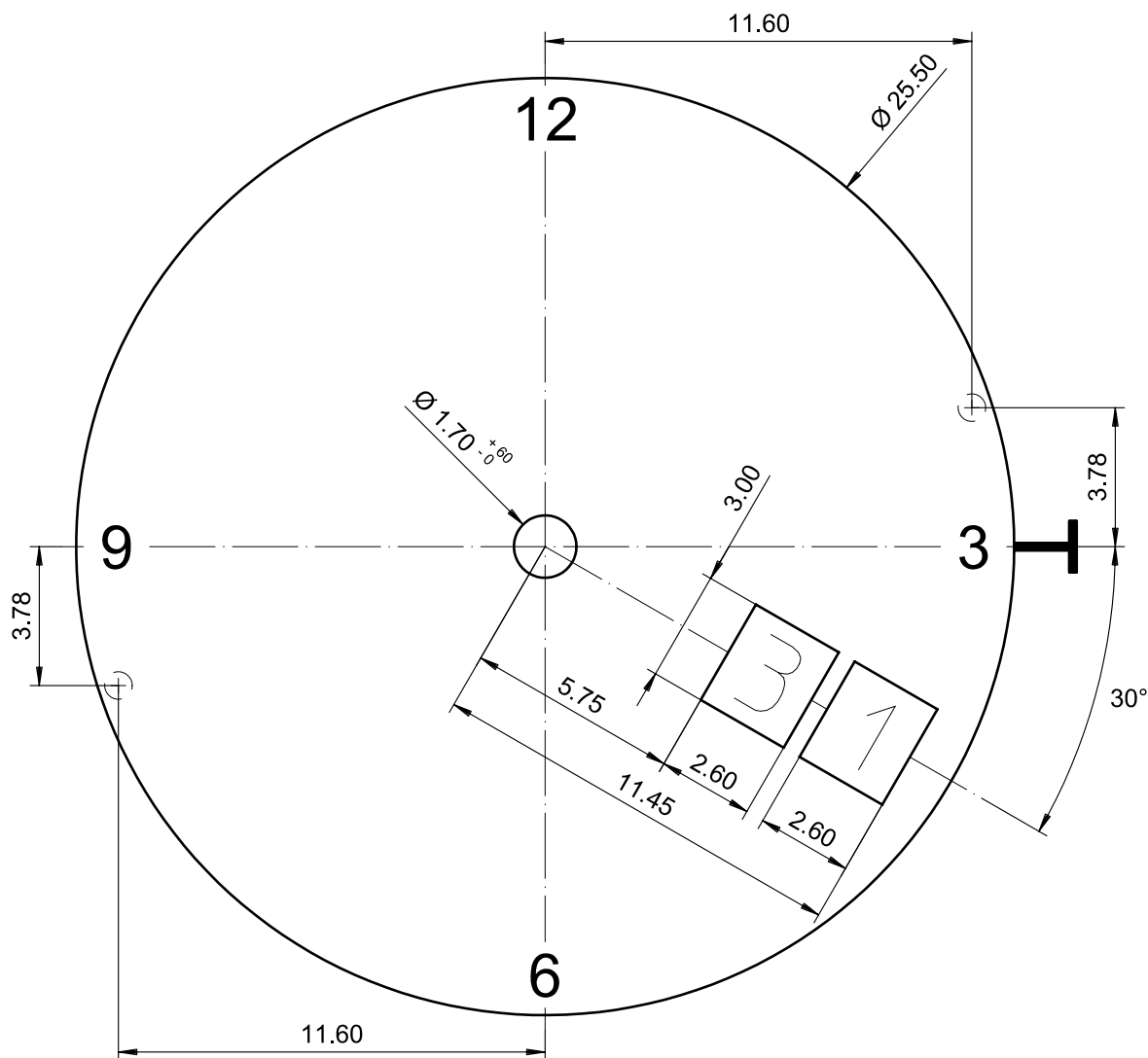
Cage Uhrwerkgestell 11½" Frame		Issued	10.03.1999	gd
		Modified	06.06.2018	ds5222
		Released	YES	
		Mod. No.	38099	
		Tolerance	±20 µm	
		Scale	10 : 1	Page 1/1 A3
RONDA	512, 513, 513S, 515, 515S 517, 517S, 519, 519S	Sous réserve de modifications Änderungen vorbehalten Modifications reserved		
		No.	5000.286	09



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

Issued	14.12.2006	cw
Modified	06.06.2018	ds5222
Released	YES	
Mod. No.	38099	
Tolerance	$\pm 20 \mu\text{m}$	
Scale	10 : 1	Page 1/1 A3

Sous réserve de modifications Änderungen vorbehalten Modifications reserved		
No.	5010.492	02



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

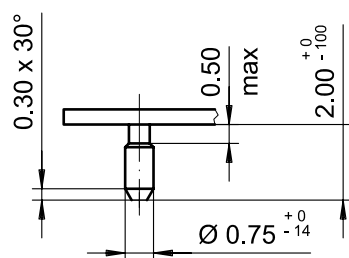
Cadran
Zifferblatt
Dial

11 1/2"

Issued	14 Dez 2006	cw
Modified	15.Dez.2006 ÄÄ xxxx	cw
Released	YES	
Tolerance	+/- 20 µm	
Scale	5 : 1 (A4V)	
Sous réserve de modifications Äenderungen vorbehalten Modifications reserved		
No.	5010.515	01

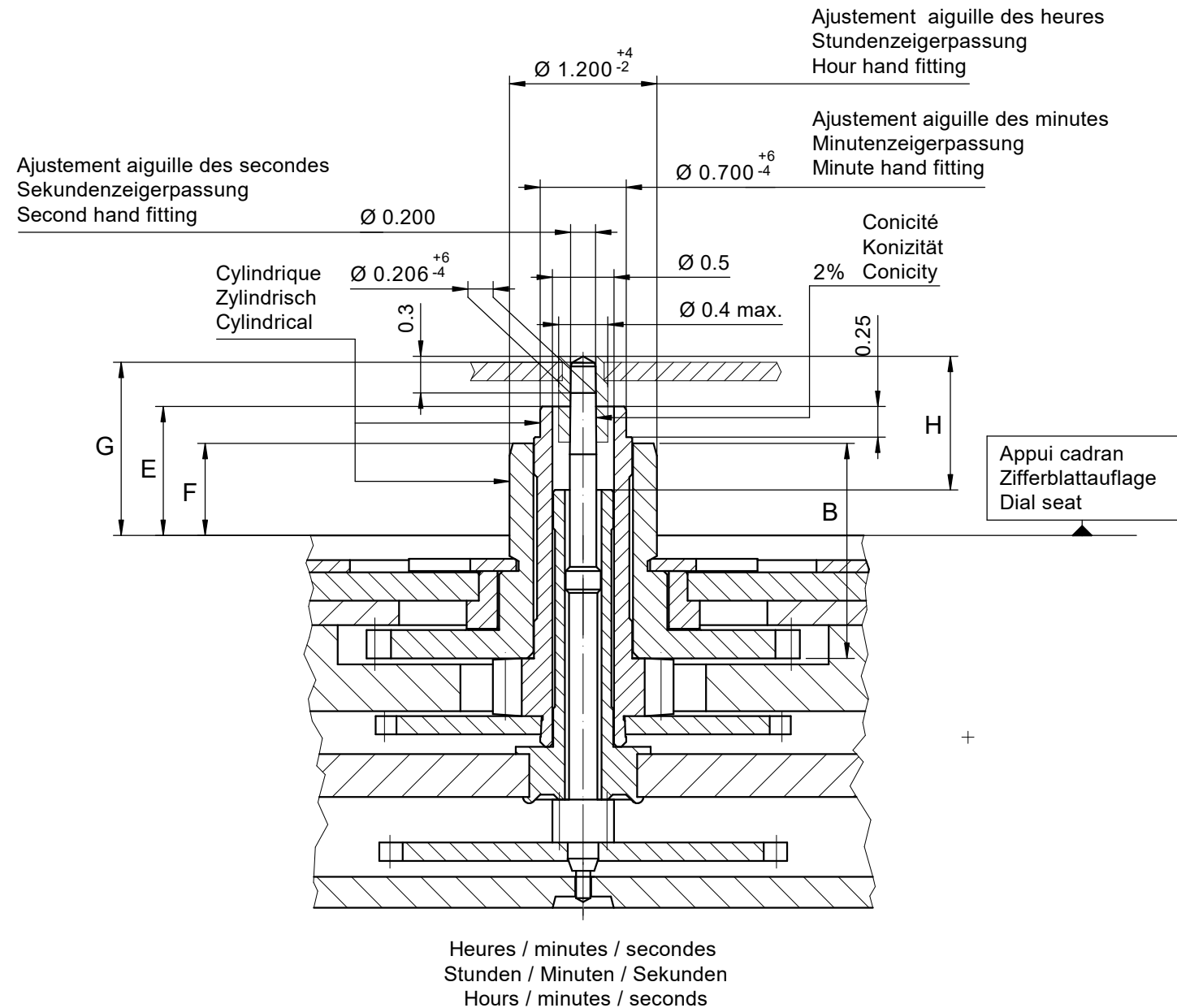
RONDA

519



Tige	Date
Stellw.	Datum
Stem	Date
3H	6H
	<input type="text"/>

Cadran Zifferblatt Dial		11½"		Issued	14 Dez 2006	cw
				Modified	15.Dez.2006 ÄÄ ----	cw
				Released	YES	
				Tolerance	+/- 20 µm	
				Scale	5 : 1 (A4V)	
RONDA	519	Sous réserve de modifications Änderungen vorbehalten Modifications reserved				
		No.	5010.516	01		



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		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	
1	G	E	F	H	B	0.95	0.65	0.40	0.15
2	1.46	1.05	0.75	1.09	1.75	1.30	1.00	0.75	0.15

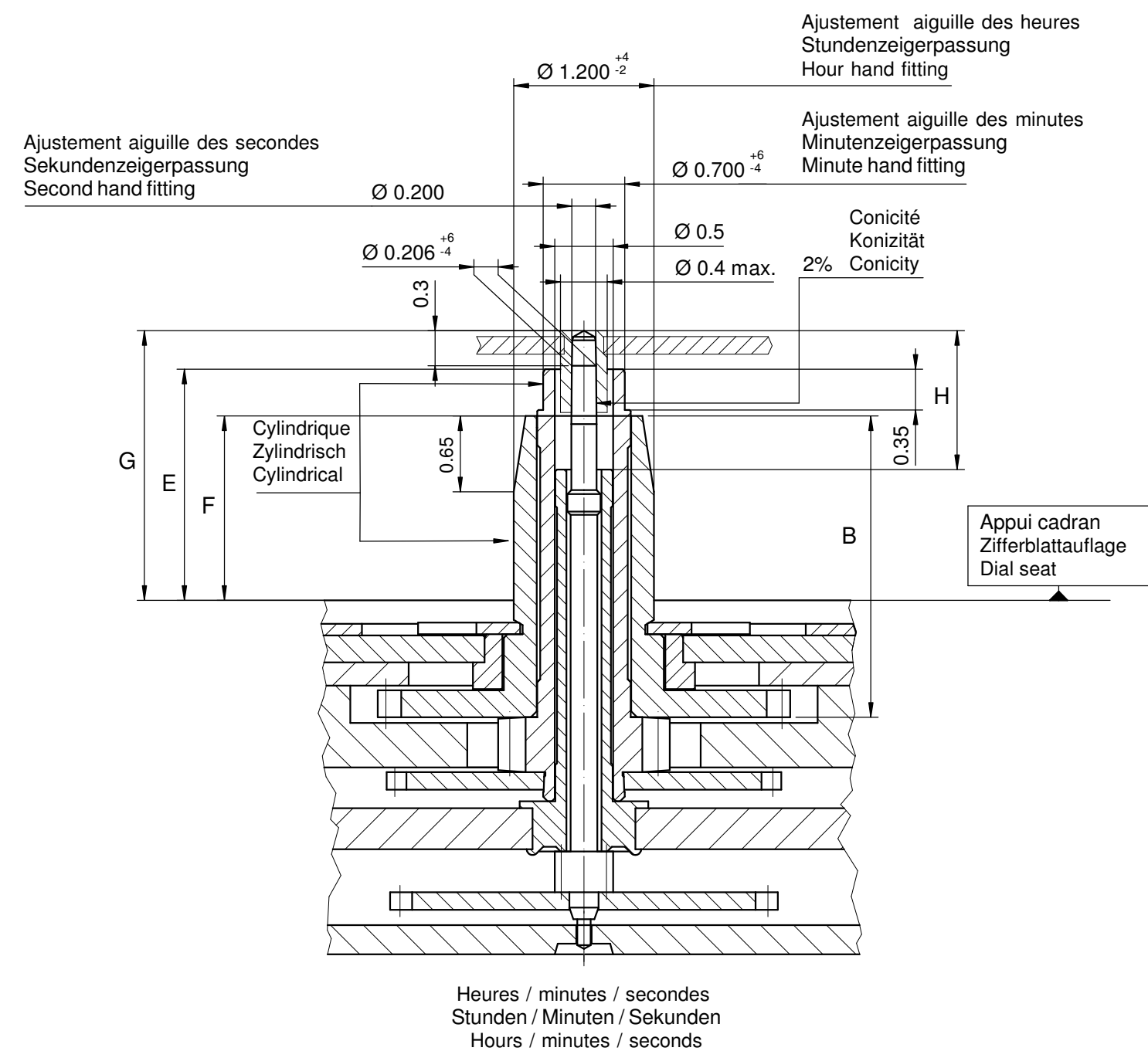
		Aig. des secondes Sekundenzeiger Second hand	Aig. des minutes Minutenzeiger Minute hand	Aig. des heures Stundenzeiger Hour hand	Lors de la pose d'aiguilles, le mouvement doit être soutenu. Beim Zeigersetzen muss das Werk abgestützt werden. The movement needs to be supported for hand setting.
mg	max.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

Aiguillages Zeigerwerkhöhen 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 A3
RONDA	507, 509, 517, 519 505.24D, 515.24D	Sous réserve de modifications Änderungen 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

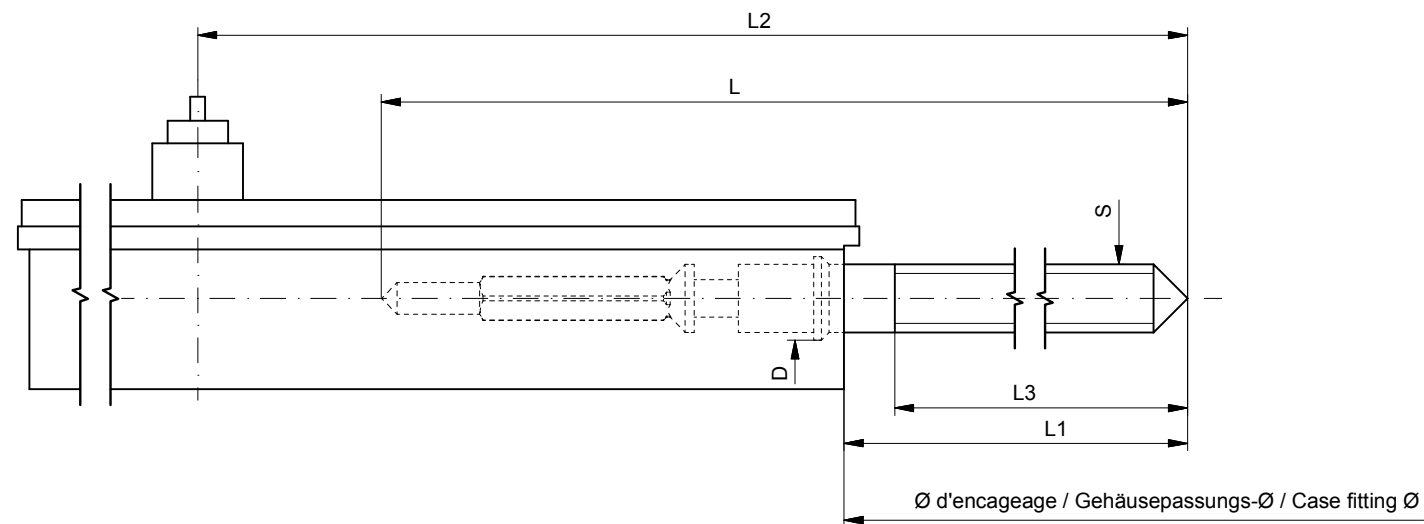


Aiguillage no ZeigerwerkhöheNr. Hand fitting height No	Dépassement Höhe über Zifferblattaufage Height over dial seat			Longueur Länge Length		Epaisseur max. (peinture comprise) Max. Dicke (inkl. Farbe) Max. thickness (paint included)			
	Pignon des secondes Sekundentrieb Second pinion	Chaussée Minutenrohr Cannon-pinion	Roue des heures Stundenrad Hour wheel	H	B	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	
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

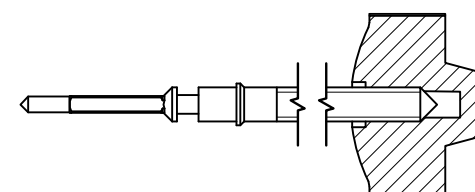
Sous réserve de toutes modifications		Änderungen vorbehalten		All modifications reserved			
Aiguillages Zeigerwerkhöhen Hand fitting heights				Issued		23 Mai 2011	dh
				Modified		24 Mai 2011 ÄA 11034	dh
				Released		Yes	
				Tolerance		µm	
				Scale		20 : 1 (A3H)	
RONDA		507, 509, 517, 519 505.24D, 515.24D		Sous réserve de modifications Änderungen 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)
Arbeitsstellwelle (im Werk eingebaut)
Working stem (implemented in the movement)

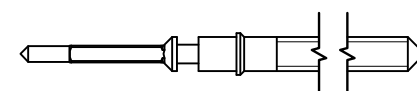
No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.164.CO	20.50	9.92	22.72	11.83	0.90	1.05



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

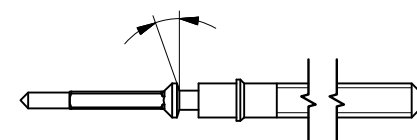
Tige (normale) / Stellwelle (normal) / Stem (normal)

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



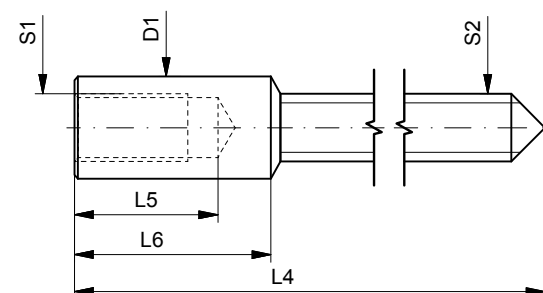
Tige (à arracher)
Stellwelle (Ausreissversion)
Stem (extractable version)

No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.163	20.50	9.92	22.72	11.83	0.90	1.05
3000.196	32.50	21.92	34.72	23.83	0.90	1.05

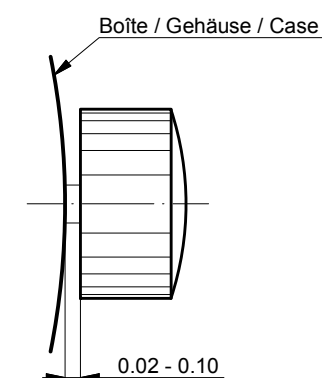


Rallonge de tige / Stellwelle Verlängerung / Stem extension

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 (Dimesionen / Kräfte)
Stem (dimensions / forces)

RONDA

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

Issued	15.08.2012	ds5222
Modified	29.06.2018	ds5222
Released	YES	
Mod. No.	38099	
Tolerance	---	
Scale	---	Page 1 / 1 A3

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No.	5030.002	02
-----	----------	----

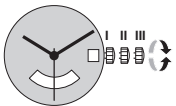
中文 使用手册
机芯型号

朗达 强力系列

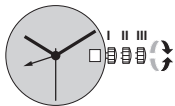
- 505.24D/515.24D
- 505.24H/515.24H
- 507/517
- 509/519

瑞士朗达是一个机芯供应商, 没有参与制造或分销成表。

若有任何手表相关之疑问, 如维修、保证期内投诉或手表功能问题, 请联络手表零售商、服务中心或制造商。所有联络资料可向您的销售员查询或参考保证文件。

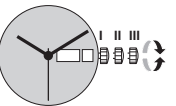


Cal. 505.24D / 515.24D



Cal. 505.24H / 515.24H

- 把的位置. I 空檔位置 (腕錶運行)
- 把的位置. II 日期速調模式
- 以上型号机芯可以在日历转换时段(10:00 PM至12 PM)速调日历, 若在这时段内设定日期, 必须比正确日期多转一天. 因机芯在12PM后不再自动转换日期.
- 把的拉至位置 II (腕表继续运行).
 - 顺时针转动把的至正确日期
 - 推把的回位置 I
- 24小时显示速調模式
- 把的拉至位置 II (腕表继续运行).
 - 逆时针转动把的至期望的时间显示
 - 推把的回位置 I
- 把的位置. III 设定时间
- 把的拉至位置 III (腕表停止运行).
 - 转动把的至正确时间 (留意24小时之上 / 下午时段).
 - 推把的回位置 I

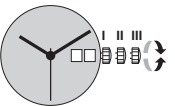


Cal. 507 / 517

- 把的位置. I 空檔位置 (腕錶運行)
- 把的位置. II 日期速調模式
- 以上型号机芯可以在日历转换时段(10:00 PM至12 PM)速调日历, 若在这时段内设定日期, 必须比正确日期多转一天. 因机芯在12PM后不再自动转换日期.
- 把的拉至位置 II (腕表继续运行).
 - 转动把的至正确日期
 - 推把的回位置 I
- 星期速調模式
- 以上型号机芯不能在星期日历史转换时段(10:00 PM至12 PM)速调星期
- 次选语言通常会在24小时后约两小时显示, 直至显示转换至所需的语言
 - 把的拉至位置 II (腕表继续运行).
 - 逆时针转动把的至正确的星期显示
 - 推把的回位置 I

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 (Ø 9.5 mm x 2.05 mm)

Precision: +20/-10 seconds per month

User's Manual English
Movements Caliber

RONDA powertech

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

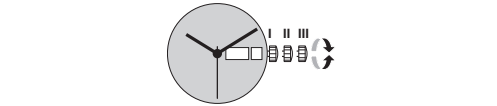
You have decided to buy a watch, which was assembled by a watchmaker using a Ronda movement. Please note that no watches are produced or distributed under the Ronda brand.

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 Cal. 505.24H / 515.24H

- 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.

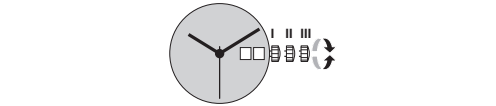


Cal. 507 / 517

- 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

- 把的位置. III 设定时间**
- 把的拉至位置III (腕表停止运行).
 - 转动把的至正确时间 (留意24小时之上 / 下午时段).
 - 推把的回位置 I



Cal. 509 / 519

- 把的位置. I 空槽位置** (腕表運行)
- 把的位置. II 日期速調模式**
此日期显示由 2 盆系统所组成. 由于结构的原因, 在每一个月的开始, 必须使用速调模式去调走 31–39 号, 直至显示 01。
- 机芯可以在日历转换时段(10:00 PM至12 PM)速调日历, 若在这时段内设定日期, 必须比正确日期多转一天. 因机芯在12PM后不再自动转换日期.*
- 把的拉至位置 II (腕表继续运行).
 - 顺时针转动把的至正确日期
 - 推把的回位置 I
- 把的位置. III 设定时间**
- 把的拉至位置III (腕表停止运行).
 - 转动把的至正确时间 (留意24小时之上 / 下午时段).
 - 推把的回位置 I

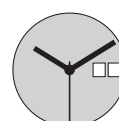
以上所有型号:
电池种类: 371/SR920SW (Ø 9.5 mm x 2.05 mm) 误差规格: +20 / -10 秒(每月)



11 1/2^{mm}



519



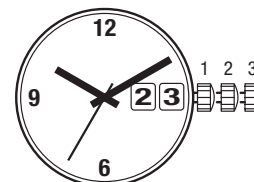
519S

Funktionen

Fonctions

Functions

Kaliber	Stellwellenpos.	Funktionen
Calibre	Pos. de tige	Fonctions
Caliber	Stem position	Functions
519	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



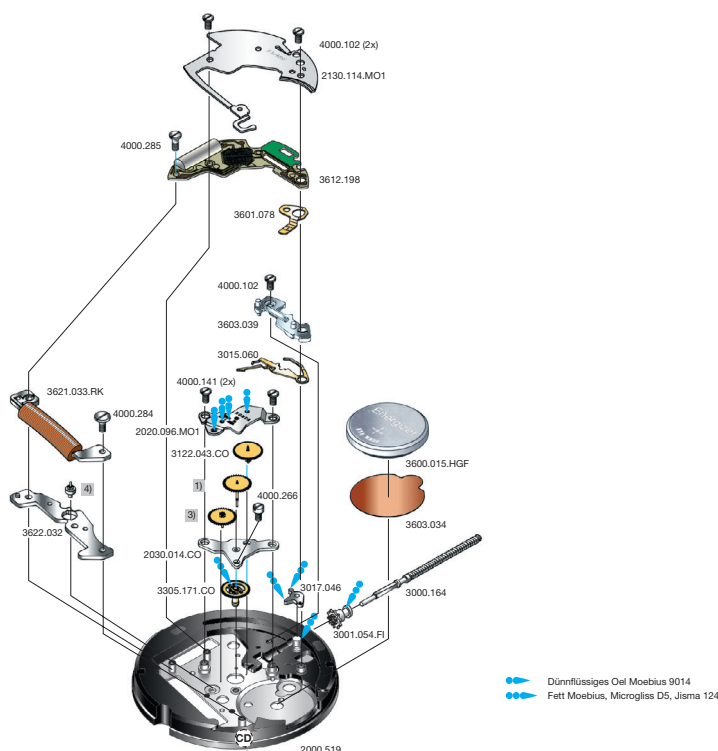
Batterie

Pile

Battery

Kaliber	Batterie	Spannung	Artikelnummer RONDA
Calibre	Pile	Voltage	Numero d'article RONDA
Caliber	Battery	Tension	Part number RONDA
519	371 / SR920SW	1.55 V	3600.015.HGF

11 1/2''' 519, 519S



Code: Beispiel CD / exemple CD / exemple CD

Cal. 519	Werkseite / Côté mouvement / Movement side		
Plan No.	Bestandteile	Fournitures	Spare Parts
2000.519	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.519

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 2 ^{ème} chiffre: ... C	2. Buchstabe: ab D Second letter: from D 2 ^{ème} 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.

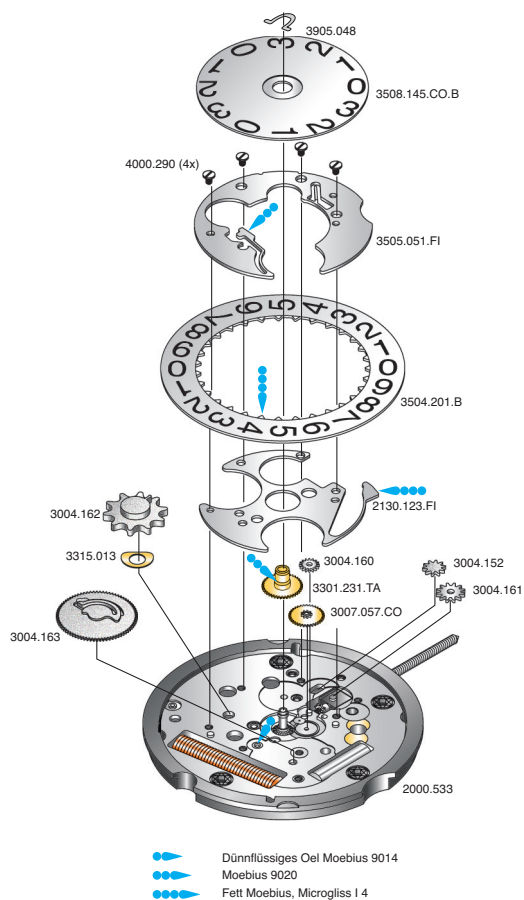
Les 3 fournitures ci-dessous forment un groupe individuel. C'est pourquoi les 3 fournitures de chaque groupe ne sont pas interchangeables.

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

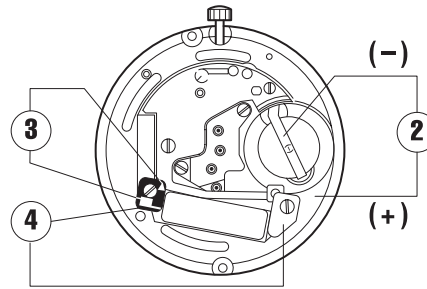
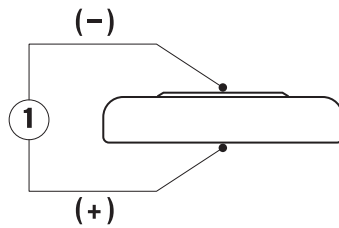
Abweichungen / Divergences / Deviations

Cal. 519S	Werkseite / Côté mouvement / Movement side		
Plan No.	Bestandteile	Fournitures	Spare Parts
3612.199	Modul	Module	Module
3621.036.RK	Spule	Bobine	Coil

11 1/2''' 519, 519S



Cal. 519	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°
3504.201.B	Datumanzeiger	Baque	Date indicator
3505.051.FI	Kal.-Abdeckplatte	Couvercle calend.	Date ind. cover
3508.145.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
519, 519S	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
519 519S	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
519, 519S	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
519 519S	3	KΩ	1,90–2,10 2,35–2,55	Spulenwiderstand Résistance de la bobine Resistance of the coil	Ohne Batterie Sans pile Without battery
519, 519S	4	KΩ	∞	Spulenisolation Isolation de la bobine Coil insulation	Ohne Batterie Sans pile Without battery
519, 519S		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 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. 519 Stellwelle entfernen

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

Cal. 519 Enlever la tige

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

Cal. 519 Stem removal

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