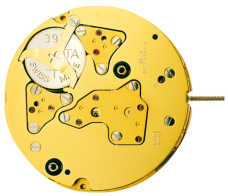
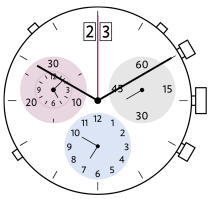
Quartz Movements
计时功能
朗达 明星系列

型号 5130.B - 12⬚’





产品规格

指针式石英机芯

系列	明星系列
型号	5130.B
尺寸	12⬚’
版本 瑞士制造	13 钻石 / 金色
电池寿命	48 月
标准针高	2

特点

- 金属机芯，可修理
- 拉停把心省电功能：节省大概70%耗电
- 两个按掣简易操作
- 大日历可快调

功能

- 响闹
- 30分钟 / 12小时计时小眼
- 中心大秒计时（1/1秒）
- 12小时计时小眼
- 积累及分段计时
- 计时
- 大日历
- 小秒针

Quartz Movements
计时功能
朗达 明星系列

型号 5130.B - 12□’

技术规格

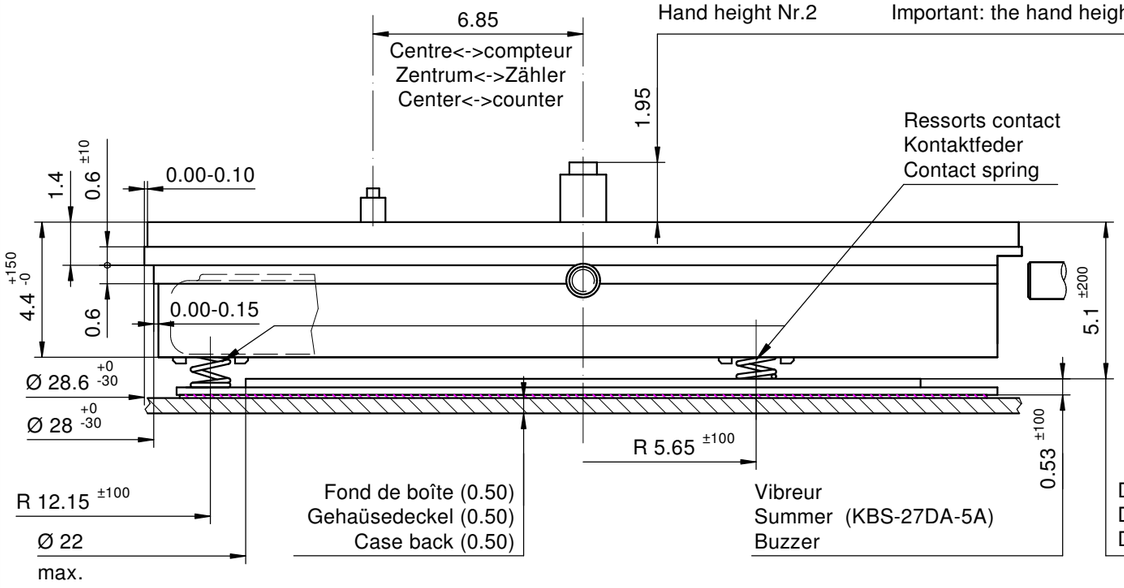
机芯直径	28.60 mm
内罩座位直径	28.00 mm
机芯厚度	4.40 mm
电池以上厚度	4.40 mm
机芯座位	0.60 mm
把中	1.90 mm
把心行程	0.90 mm
把心螺纹直径	0.90 mm
秒针运行扭力 - 一般情况下	6 μNm
分针运行扭力 - 一般情况下	300 μNm
计时大秒针运行扭力 - 一般情况下	7 μNm
运作温度	0 - 50 ° C
误差率	-10/ +20 秒/月
防磁度	18.8 Oe
防震度	NIHS 91-10

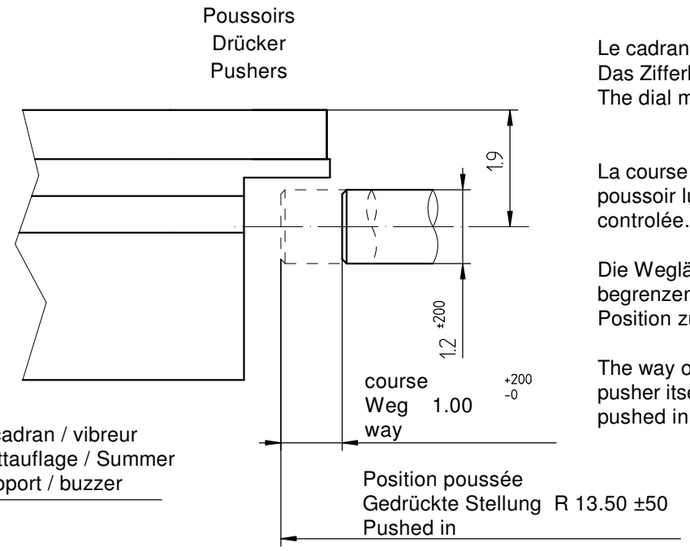
电池规格

电池类型	型号 395
电池寿命	48 月
电压	1.5 V
电耗 - 一般情况下	1.48 μA (日历不在跳动当中)
电耗 - 上限	1.65 μA (日历不在跳动当中)

Aiguillage No.2
Zeigerwerkhöhe Nr.2
Hand height Nr.2

Important: l'aiguillage peut varier selon le modèle
Wichtig: die Zeigerwerkhöhe kann bei verschiedenen Modellen unterschiedlich sein
Important: the hand height can vary between different models





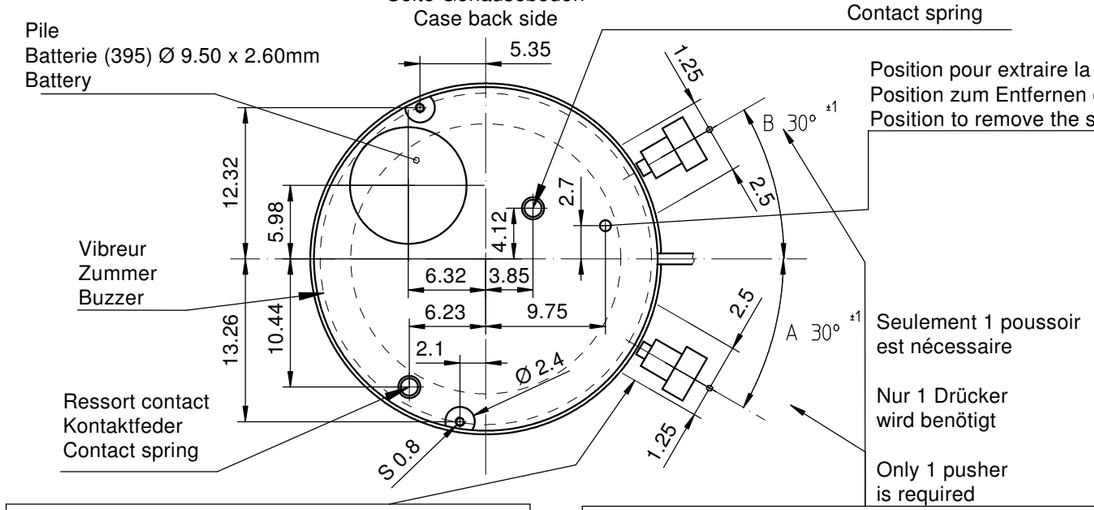
Sécurité entre l'aiguille des secondes et le verre:
Sicherheit zwischen Sekundenzeiger und Glas: 0.30mm
Security between second hand and glass:

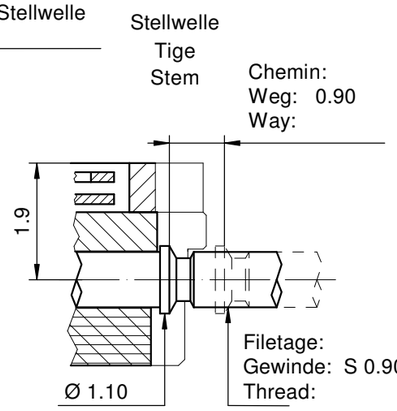
Le cadran doit être tenu par la boîte
Das Zifferblatt muss durch die Schale gehalten werden
The dial must be hold by the case

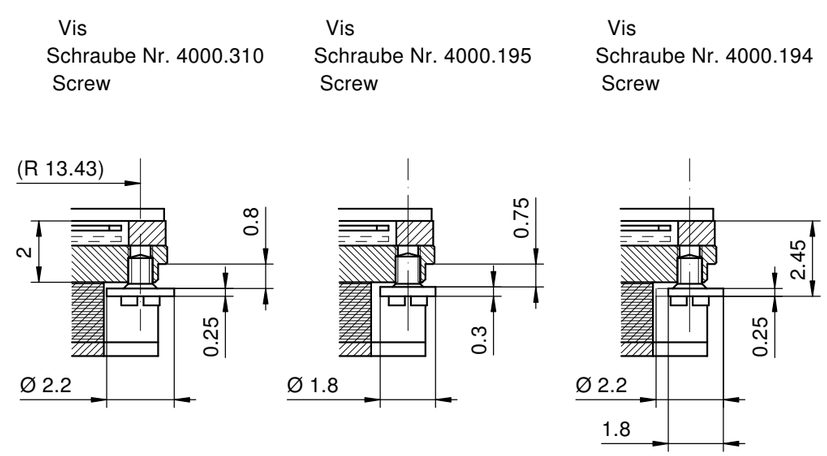
La course du poussoir doit être limitée dans le poussoir lui-même. Sa position poussée doit être controlée.

Die Weglänge des Drückers ist im Drücker selbst zu begrenzen. In der gedrückten Stellung ist seine Position zu kontrollieren

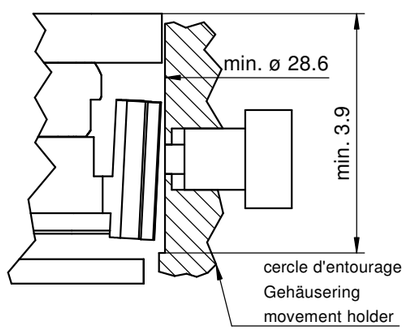
The way of the pusher has to be limited in the pusher itself. Its position must be checked while pushed in.







Dégagement cercle d'entourage pour poussoir
Freistellung Gehäusering für Drücker
Opening movement holder for pusher



L'angle indiqué pour la direction du poussoir et la position doivent être respectés.
Pour un angle de 0° des poussiors A et B, voir plan 5000.345

Der angegebene Winkel für die Drückerrichtung und die Position müssen eingehalten werden.
Für einen Drückerwinkel von 0° bei A und B, siehe Zeichnung 5000.345

The indicated angle of the pusher direction and the position must be fullfilled. For pusher angles of 0° (pusher A and B), see drawing 5000.345.

Cage
Urwerkgestell 12½'''
Frame

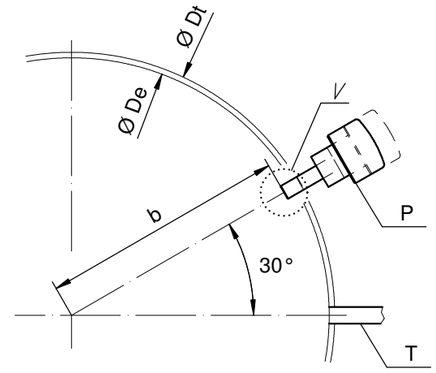
RONDA | 5130.B, 5130.D

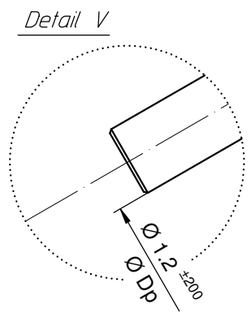
Issued	16 Jan 2006	mg
Modified	05 Sep 2016 ÄA 34777	dh
Released	YES	
Tolerance	+/- 20 µm	
Scale	10 : 1 (5 : 1) (A3H)	

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

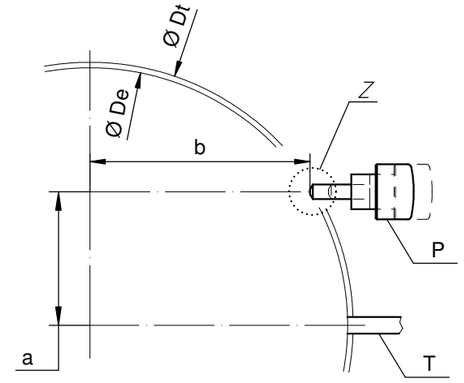
No. 5000.355 05

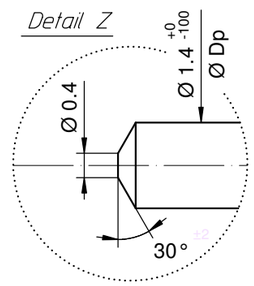
Angle Winkel Angle 30°	
Ø Dp	b
1.00	13.50
1.10	13.50
1.20	13.50
1.30	13.50
1.40	13.50



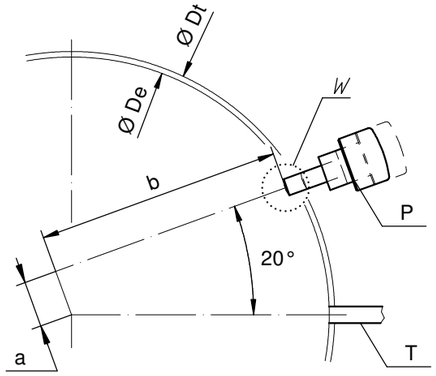


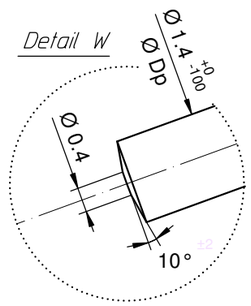
Angle Winkel Angle 0°		
Ø Dp	a	b
1.30	7.40	11.43
1.40	7.45	11.40



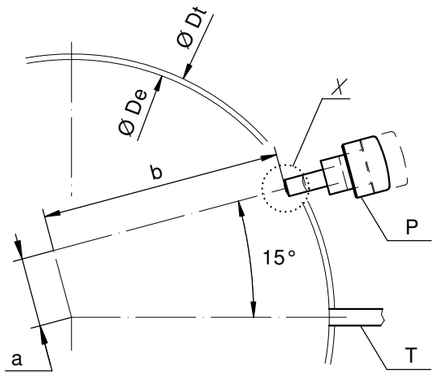


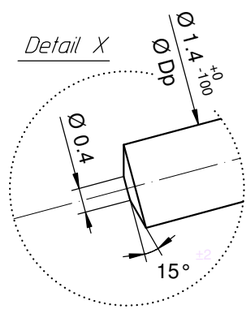
Angle Winkel Angle 20°		
Ø Dp	a	b
1.30	2.57	13.22
1.40	2.59	13.21



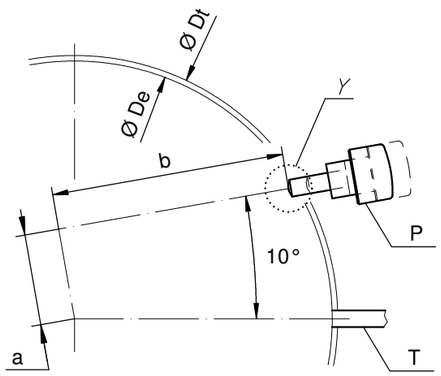


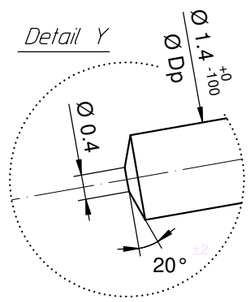
Angle Winkel Angle 15°		
Ø Dp	a	b
1.30	3.83	12.92
1.40	3.86	12.91





Angle Winkel Angle 10°		
Ø Dp	a	b
1.30	5.06	12.52
1.40	5.10	12.50





Ø De: diamètre d'encageage
Durchmesser der Gehäusepassung
fitting-diameter

Ø Dp: diamètre du poussoir
Drückerdurchmesser
pusher-diameter

Ø Dt: diamètre total
Totaldurchmesser
total-diameter

P: poussoir en position poussée
Drücker in gedrückter Stellung
pusher in pressed position

T: tige de mise à l'heure
Stellwelle
stem

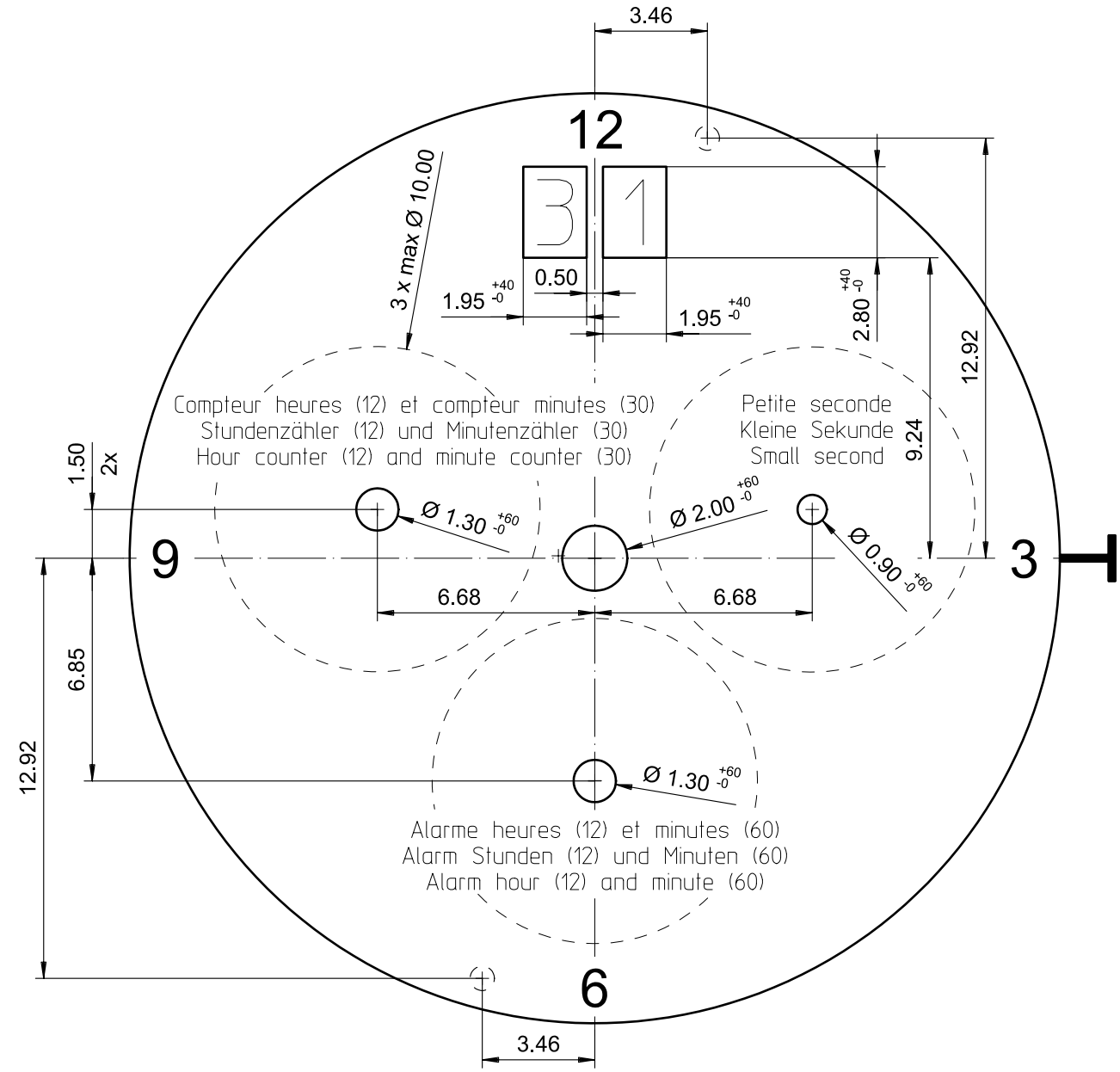
Angle des poussoirs A et B
Winkel der Drücker A und B
Angle of pusher A and B

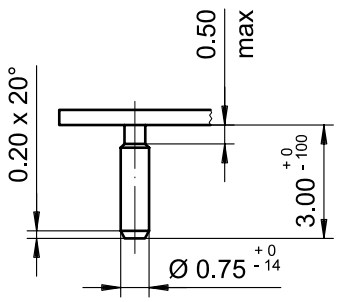
Issued	06 Sep 2004	mk
Modified	30.März 2005 ÄA 1784	mk
Released	YES	
Tolerance	+/- 20 µm	
Scale	10 : 1 (5 : 1) (A3H)	

RONDA | 4xxx.x, 5xxx.x

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No. 5000.345 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
Dial

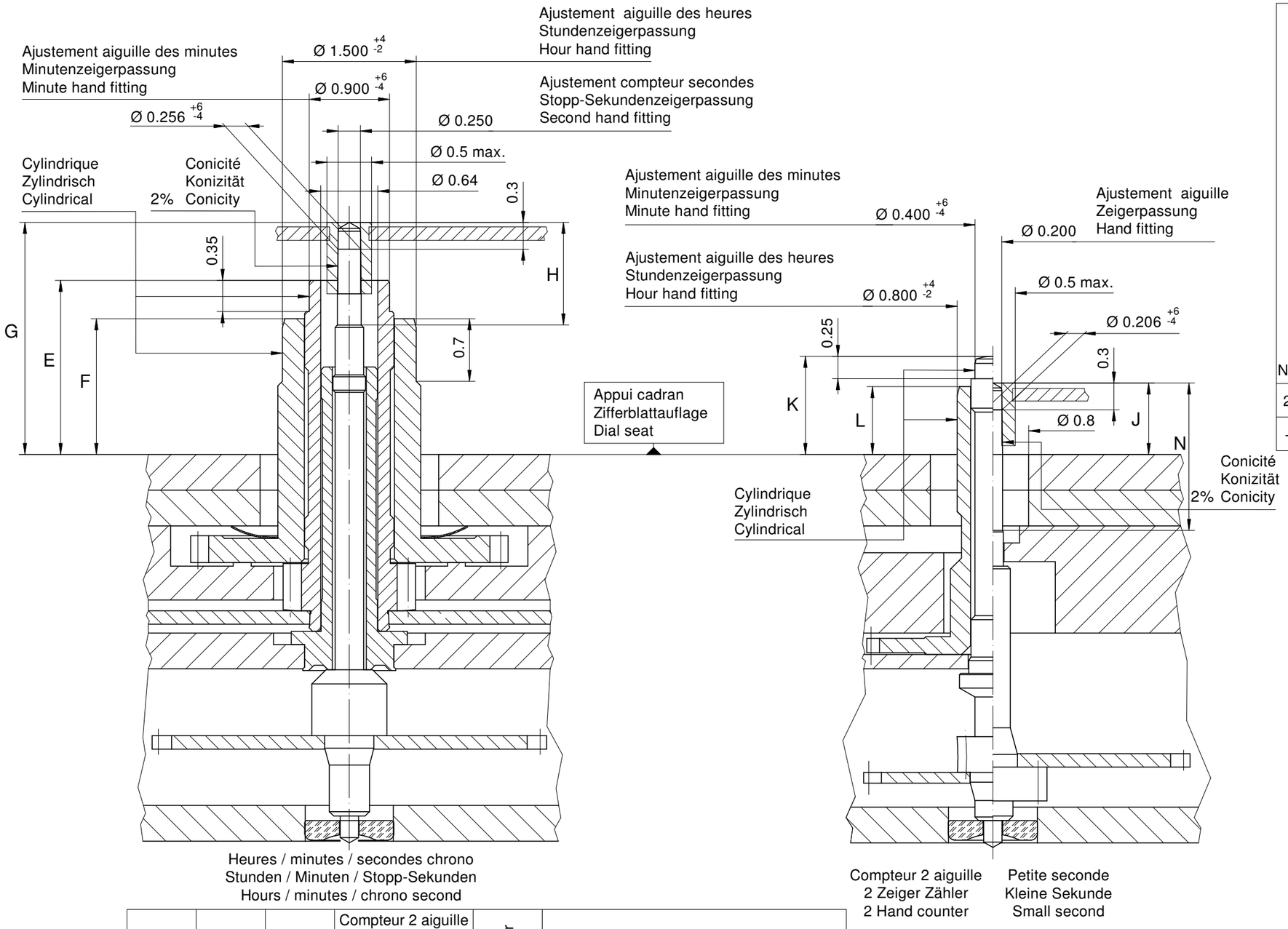
12½‴

Issued	13 Dez 2006	cw
Modified	11.Apr.2007 ÄA ----	cw
Released	YES	
Tolerance	+/- 20 µm	
Scale	5 : 1 (A4V)	

RONDA | 5130.B

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

No. 5010.620 00



Aiguillages
Zeigerwerkhöhe
Hand fitting height

	Dépassement Höhe über Zifferblattauflage Height over dial seat							
	Pignon des secondes chrono Stopp-Sekundentrieb Chrono second pinion	Chaussée Minutenrohr Cannon-pinion	Roue des heures Stundenrad Hour wheel			Compteur 2 aig. 2 Zeiger Zähler 2 Hand counter		
						Chaussée Minutenrohr Cannon-pinion	Roue des heures Stundenrad Hour wheel	Petite seconde Kleine Sekunde Small second
No	G	E	F	H	N	K	L	J
2	2.60	1.95	1.52	1.15	1.65	1.10	0.76	0.80
-								

Aiguillages
Zeigerwerkhöhe
Hand fitting height

	Peinture comprise / inkl. Farbe / Paint included						
	Epaisseur maximum du cadran Maximale Zifferblattdicke Maximum dial thickness						
				Compteur 2 aig. 2 Zeiger Zähler 2 Hand counter			
	Sous l'aiguille des secondes chrono Unter Stopp-Sekundenzeiger Under chrono 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 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
No							
2	2.10	1.55	1.10	0.70	0.40	0.40	0.15
-							

	Aig. des sec. chrono Stopp-Sekundenzeiger Chrono second hand	Aig. des minutes Minutenzeiger Minute hand	Aig. des heures Stundenzeiger Hour hand	Compteur 2 aiguille 2 Zeiger Zähler 2 Hand counter Aig. des minutes Minutenzeiger Minute hand	Compteur 2 aiguille 2 Zeiger Zähler 2 Hand counter 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.	10	30	30	10	10	10	Masse / Masse / Weight *
µNm max.	0.06	0.80	0.80	0.03	0.03	0.07	Balourd / Unwucht / Unbalance *
gmm ^{2} max.	1.0	-	-	1.0	-	0.4	Inertie / Massenträgheit / Inertia *
N max.	30	40	40	30	30	30	Force de chassage / Aufpresskraft / Force

Aiguillages
Zeigerwerkhöhe 12½'''
Hand fitting heights

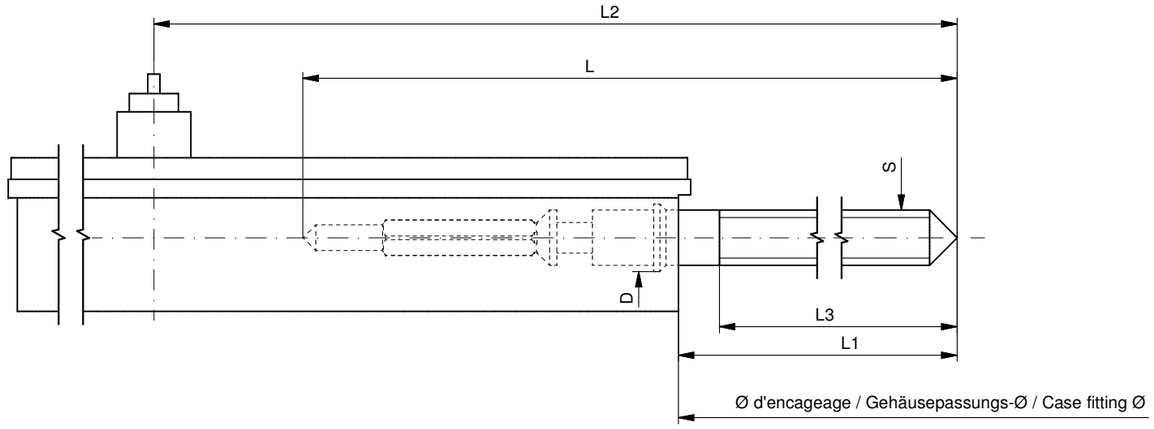
Issued	14 Nov 2003	mk
Modified	15 Okt 2014 ÄA 13275	dh
Released	Yes	
Tolerance	µm	
Scale	20 : 1 (A3H)	

RONDA | 5020.B, 5130.D, 5130.B

Sous réserve de modifications
Aenderungen vorbehalten
Modifications reserved

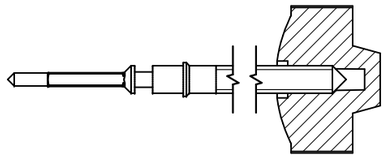
No. 3316.081 07

* 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)

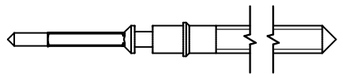
No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.177.CO	20.00	10.23	24.23	10.15	0.90	1.10



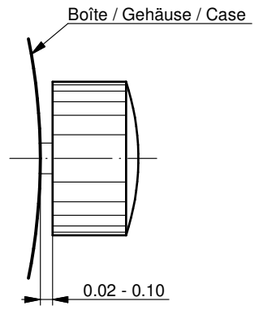
Couleur de la couronne Kronenfarbe Crown color	bleu foncé dunkelblau dark blue
Code	UN 5002

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

No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.177	20.00	10.23	24.23	10.15	0.90	1.10
3000.191	32.00	22.23	36.23	22.15	0.90	1.10



Couronne normale
Normale Krone
Normal crown

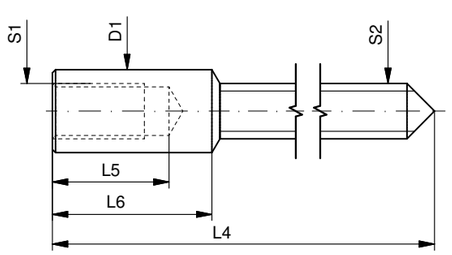


Couronne vissée
Geschraubte Krone
Screwed crown

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

5010.B, 5020.B, 5021.D, 5030.D,
5040.B, 5040.D, 5040.E, 5040.F,
5050.B, 5050.C, 5051.C, 5130.B, 5130.D

Issued	05 Sep 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.	5030.019	01

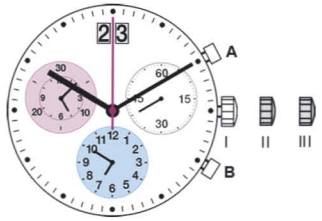
Movement holder
Removing setting stem
H5XXX.1T

Movement holder
Setting hands
H5XXX.1A4

PCB-Alarm
Installing Piezo function for H5XXX.1A4
H5XXX.1P

Fitting dial and hands

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



Date switching duration
First and tenth digit discs *~2hrs*

***Zeroing chronograph hand**

A. Activate pushers A and B together for 2 seconds
(Chrono seconds hand rotates once)
B. Pusher A → to correct chrono seconds hand
C. Pusher B → to jump to hour and minute hand
D. Pusher A → to correct hand position

Details: *See Instruction Manual*

****Setting alarm reference time**

- Press pusher B for at least 2 secs (activates reference time mode)
- Using pusher B, synchronise reference time with actual time:
  - Short press (< 1 sec.) → +1 minute
  - Medium press (1-2 secs) → +1 hour
  - Long press (> 2 secs) → continuous

Details: *See Instruction Manual*

General Instructions

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

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

Permitted hand setting strengths:

Hr / min. hands: <40N

Other hands: <30N

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

Alarm reference time tip

The reference time runs in the background, behind the watch time, on which the ALARM time is based. So with every new time setting, the reference time must be freshly synchronised.

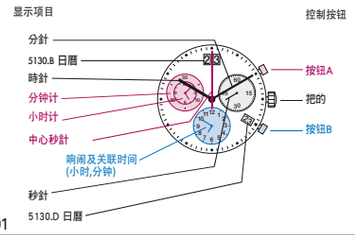
朗达 明星系列 - 机芯型号 5130.D & 5130.B

中文 使用手册

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。

显示和控制按钮描述



01

多功能机芯

Cal. 5130.D 及5130.B 是结合响闹及记时功能
所有的功能可以由两个按制及把的来控制.

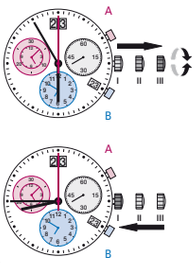
原本状态 (计时指针在零位置)
- 按下按钮A 开始记时
- 按下按钮B 开启 / 关闭响闹功能

记时功能启动
当按下按钮A, 按钮B 亦同时运作
当完成记时及记时指针还原到零位置, 按钮功能再一次返回<<原本状态>>

当记时功能启动时, 不能调校响闹时间

02

设定时间



❶* 把的拉至位置III
(腕表停止运行).

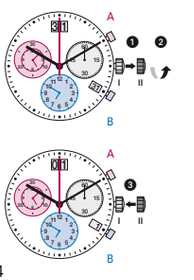
❷ 转动把的至正确时间 8:45.

❸* 推把的回位置 I

注意:
为了设定准确的秒数,❶ 当秒针指向 „60“ 拉把的设定完小时及分钟后,❷必须在正确的秒数将把的推回位置 I

03

设定日期 (快速模式)



❶ 把的拉至位置II
(腕表仍然运行)

❷ 转动把的至正确日期 1

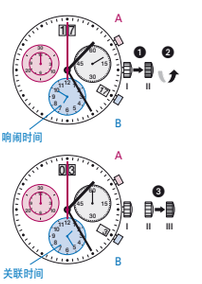
❸ 推把的回位置I

注意:
9.00PM至12.00PM为日历转换时段,若在这时段内设定日期,必须比正确日期多转一天

5130.B: 过快转换日期可能引致日期显示错误. 转换日期由01 至31(位置II)可以使日期再次同步

04

设定时间及日期

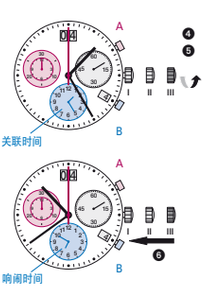


例子:
– 腕錶的日期及時间 17 / 1:25 AM
– 現時的日期及時间 04 / 10:39 PM

❶ 把的拉至位置II(腕表仍然运行)

❷ 转动把的至昨天的日期 3

❸ 把的拉至位置III
(腕表停止运行. 会由显示响闹时间转为关联时间)



❹ 转动把的至正确日期 04

❺* 转动把的至现时的时间 0:39PM

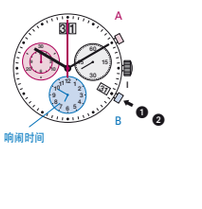
❻ 推把的回位置!
(会由显示关联时间转为响闹时间)

注意:
设定时间后必须更正相同的关联时间
(请看章节标题<<设定关联时间>>)

* 请留意AM/PM时间

05

设定响闹时间



❶ 启动设定模式
持续按下按钮最少2秒. 当细分针前进一分钟, 设定模式便启动

❷ 设定
短按(小於1秒):
响闹时间逐分钟前进

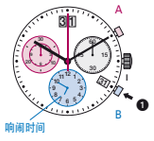
長按場多於2秒):
响闹时间持续前进直至放开按钮

注意:
当记时功能启动时, 不能使用响闹功能

注意:
按钮放开超过10秒, 设定模式会自动关闭.
同一时间会发出2次响声, 以表示响闹功能启动

06

响闹功能开后 / 关闭



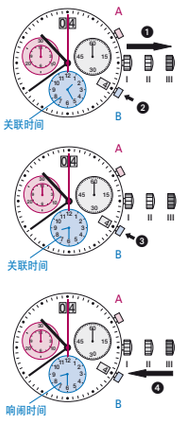
❶ 按下振钮启动 / 关闭响闹功能 :
2次响声 → 响闹功能启动
1次响声 → 响闹功能关闭

注意:
响闹设定的时间最多可以比要求的响闹时间早12 小时

当到达响闹时间, 信号会持续20 秒.
2 分钟后信号会重复发出
当按下按钮后, 信号便会立刻停止.

07

设定关联时间



❶* 把的拉至位置III
(秒针表停止运行. (秒针表停止运行. 显示会由响闹时间转为关联时间)

❷ 启动调较模式
按下按钮最少2秒. 当细分针前进一分钟, 表示调较模式已启动.

❸ 短按(小於一秒):
关联时间逐分钟前进

中按(1秒-2秒):
关联时间前进1小时

長按(多於2秒):
关联时间持续前进直至放开按钮

❹* 推把的回位置I
(显示会由关联时间转为响闹时间)
会有响闹功能关闭信号发出

注意:
关联时间必须要与实际时间同步, 意思是如果要重设实际时间必须要同时设定关联时间, 然后才去设定响闹时间.

什么是关联时间?

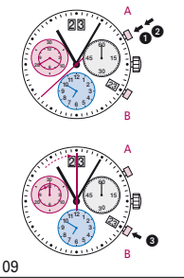
时针及分针是显示现在的时间

同时地关联时间是在背后运作; 响闹时间是参考关联时间. 所以设定时间后必须更正相同的关联时间

如果关联时间与现在时间不同步, 响闹信号便不会在设定的响闹时间发出

08

记时器(基本功能)



(开始 / 停止 / 还原)

例子:
❶ 开始: 按下按钮 A.

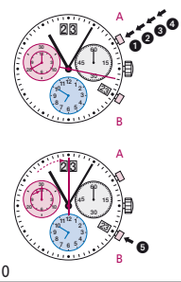
❷ 停止: 再按下按钮A停止计时, 然后阅读记时计:
4小时 / 20 分 / 38 秒

❸ 返回零位置:
按下按钮 B.
(记时指针会还原到零位置).

注意:
当记时功能启动时, 不能使用响闹功能

09

记时器:
计算累积时间

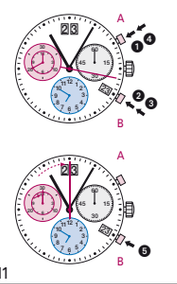


例子:
❶ 开始: (开始计时)
❷ 停止: (例子: 15分 5秒 ❶ 后)
❸ 再开始: 继续计时)
❹*停止: (例子: 5分 12秒 ❸后)
= 20分 17秒
(显示累积计算时间)
❺ 还原:
记时指针会还原到零位置.

注意:
* 步骤 ❹ 后, 可再按下按钮 A 继续计算累积时间
(再开始 / 停止, 再开始 / 停止, ⋯)

10

记时器:
计算分段时间

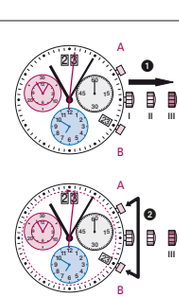


例子
❶ 开始: (开始计时)
❷ **显示分段时间:**
例子 20 分钟 17 秒 (指针停止, 记时器仍然在背 后运行)
❸ **追时:**
(记时指针会迅速到达持续计算的时间).
❹ 停止: (显示最后的时间)
❺ 还原:
记时指针返回零位置

注意:
* 步骤 ❸后, 可再按下按钮 B 继续计算分段时间
(显示分段时间 / 追时, ...)

11

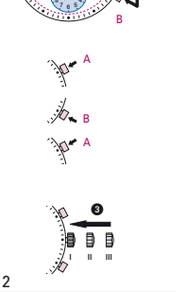
调较记时指针到零位置



例子:
当有计时指针不在零位置时,便需要调较指针
(例如: 更换电池后).

❶ 把的拉至位置III
(计时指针在/不在零位置).
(会由显示响闹时间转为关联时间)

❷ **同时及持续按下按钮 A 及 B 最少 2 秒**
(中心秒计会转动360˚ → 修正模式启动).



调较中心秒计
单步前进 A 1 x 短按
连续前进 A 长按

调较下一支指针 B

调较分钟计及小時计指针
(机械连结)
单步前进 A 1 x 短按
连续前进 A 长按

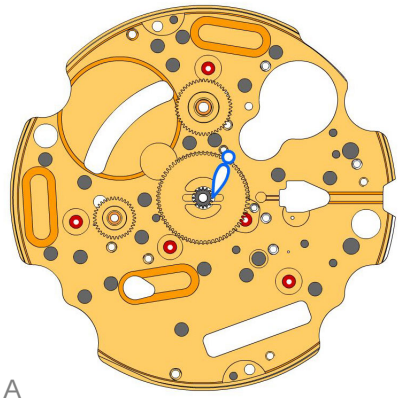
❸ 推把的回位置 I
结束调较记时指针(能在任何时候执行)

12

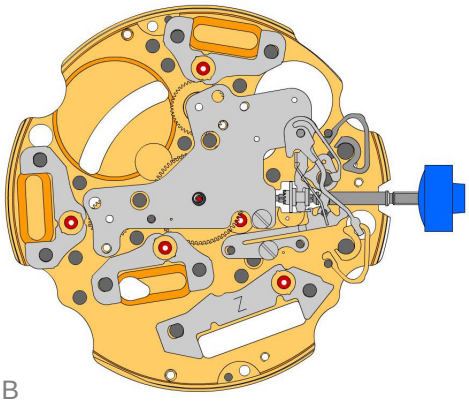
CE

06/2014

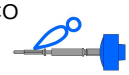
电池种类: 395 (直径 9.5mm x 2.6mm / SR 927 SW)
误差规格: +20 / -10 秒(每月)

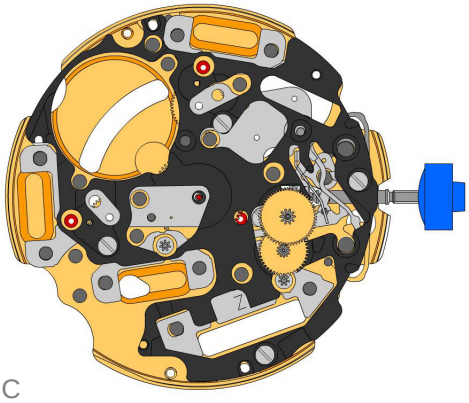


A



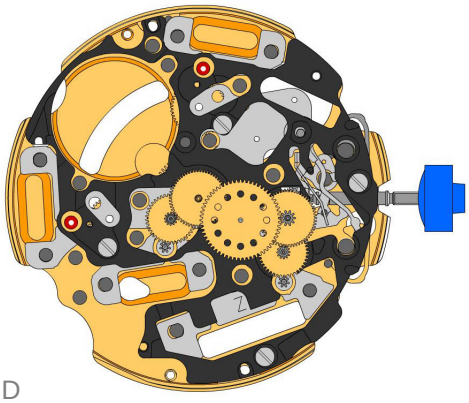
B

2000.574.G 1.		Main plate
3305.282.CO 2.		Cannon pinion with driver (Aig.2)
3301.244.CO 3.		Hour wheel (counter 24h) (Chrono)
3301.243.CO 4.		Hour wheel (counter 12h) (Alarm)
2030.017.CO 5.		Centre bridge Centre bridge held by 1 screw 4000.250. Parts 2030.017.CO, 3004.223 and 3500.059 must be exchanged together.
4000.250 6.		Screw
3001.055.FI 7.		Sliding pinion
3000.177.CO 8.		Setting stem
3017.049 9.		Setting lever
3905.049 10.		Setting lever jumper (3 positions) Setting lever jumper held by 1 screw 4000.250.
4000.250 11.		Screw
3015.081 12.		Yoke (3 positions) Parts 3015.081 and 3905.067 must be exchanged together.
3905.067 13.		Yoke spring Tensioning the spring arm. Parts 3015.081 and 3905.067 must be exchanged together.
3406.030 14.		Pusher jumper B Put the grey jumper between the two posts on the further side.
3406.038 15.		Pusher jumper A Put the yellow jumper between the two posts on the closer side.
3622.040 16.		Stator Mark |Z| on stator.
3622.039 17.		Stator (counter 6h, 9h, chrono)
3622.039 18.		Stator (counter 6h, 9h, chrono)
3622.039 19.		Stator (counter 6h, 9h, chrono)



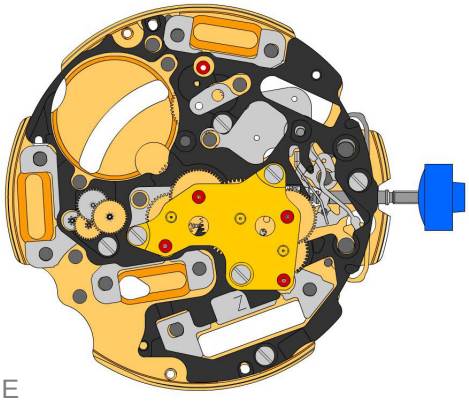
C

3603.079 20.		Plastic bracket Plastic bracket held by 4 screws 4000.250.
4000.250 21.		Screw
3715.094.RK 22.		Rotor
3715.094.RK 23.		Rotor



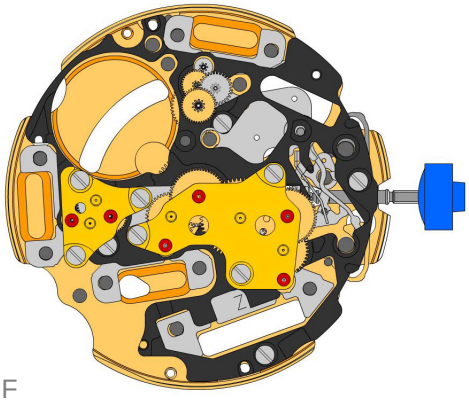
D

3147.046.CO 24.		Intermediate wheel
3136.142.CO 25.		Second wheel (long)
3147.047.CO 26.		Intermediate wheel (chrono)
3136.144.CO 27.		Chronograph wheel (Aig.2)
3122.056.CO 28.		Third wheel



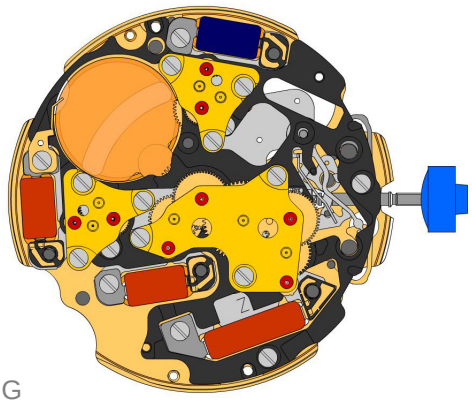
E

2020.148.G 29.		Train wheel bridge Train wheel bridge held by 3 screws 4000.250.
4000.250 30.		Screw
3715.095.RK 31.		Rotor
3147.048.CO 32.		Intermediate wheel (counter)
3007.056.CO 33.		Minute wheel (counter 24h)
3402.008.CO 34.		Minute counting wheel



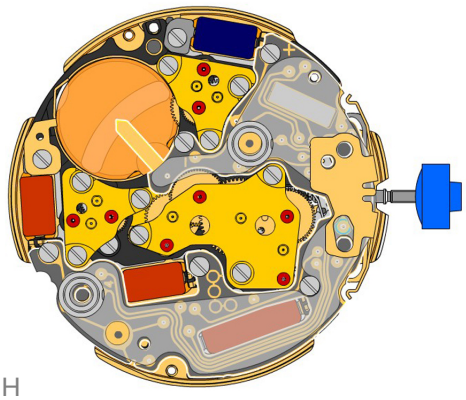
F

2020.149.G 35.		Counter train wheel bridge Train wheel bridge held by 3 screws 4000.250.
4000.250 36.		Screw
3715.095.RK 37.		Rotor
3147.048.CO 38.		Intermediate wheel (counter)
3007.055.CO 39.		Minute wheel (counter 12h)
3402.007.CO 40.		Minute counting wheel

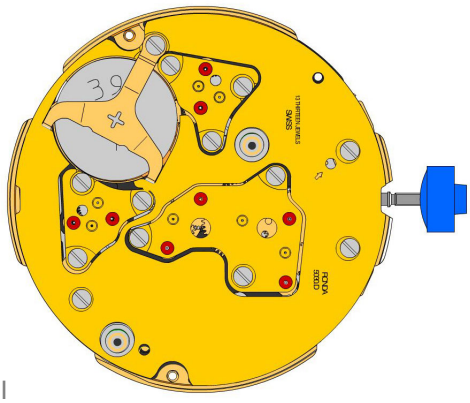


G

2020.149.G 41.		Counter train wheel bridge Train wheel bridge held by 3 screws 4000.250.
4000.250 42.		Screw
3621.053.RK 43.		Coil Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.054.RK 44.		Coil (counter 9h, chrono) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.054.RK 45.		Coil (counter 9h, chrono) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.055.RK 46.		Coil (counter 6h) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
4000.250 47.		Screw



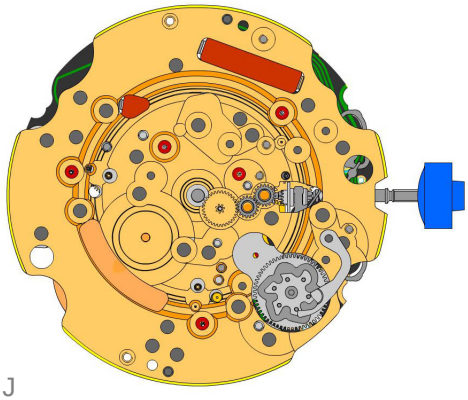
H



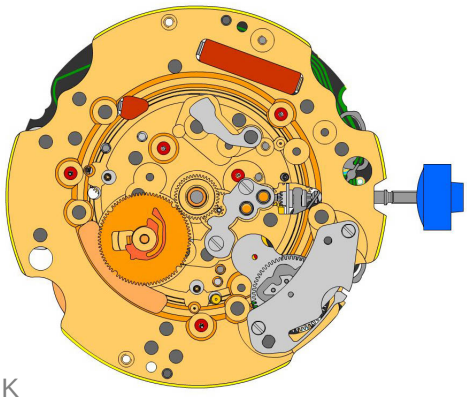
I

3601.118 48.		Contact strip Contact strip held by 1 screw 4000.250.
4000.250 49.		Screw
3603.034 50.		Battery insulator
3612.176.5130 51.		Electronic module Electronic module held by 5 screws 4000.248. Electronic measurements may be realised now.
4000.248 52.		Screw
3603.069 53.		Circuit insulator
3603.070 54.		Contact insulator
3603.070 55.		Contact insulator
3601.107.G 56.		Pusher contact spring

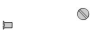
2130.159.G.M01.5130B 57.		Electronic module cover Electronic module cover held by 1 screw 4000.250.
3600.010.HGF 58.		Battery 395
3601.109.G 59.		Bridle + Bridle held by 1 screw 4000.250.
4000.250 60.		Screw

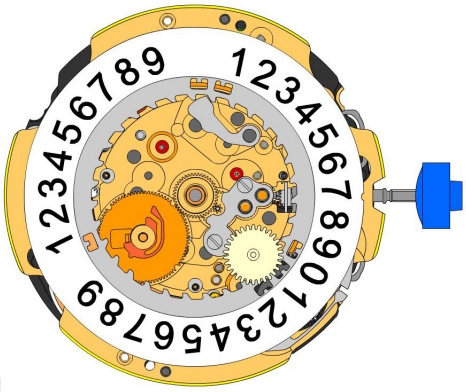


J



K

2000.574.G 61.		Main plate
3004.164 62.		Setting wheel
3004.164 63.		Setting wheel
3007.054.CO 64.		Minute wheel
2130.143 65.		Minute train bridge Minute train bridge held by 3 screws 4000.305.
4000.305 66.		Screw
3004.223 67.		Tens indicator driving wheel Parts 2030.017.CO, 3004.223 and 3500.059 must be exchanged together. The short tooth of the tens indicator driving wheel must point to the center of the movement.
3500.059 68.		Tens jumper Parts 2030.017.CO, 3004.223 and 3500.059 must be exchanged together.
2130.142 69.		Tens jumper maintaining plate Tens jumper maintaining plate held by 2 screws 4000.306. Tensioning the spring arm.
4010.306 70.		Screw
3301.242 71.		Hour wheel (Aig.1)
3315.016 72.		Friction spring
3004.224.CO 73.		Date indicator driving wheel
3500.049 74.		Date jumper



L

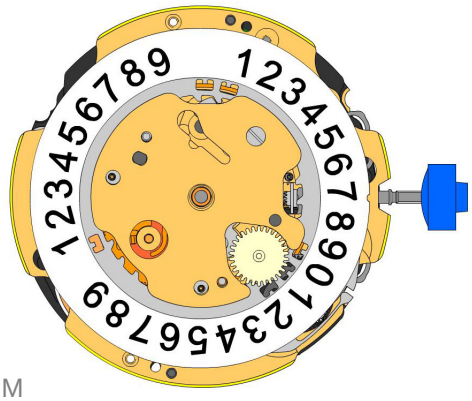
3504.214.AF.1.A 75. Units indicator (standard)
Nick of the indicator at 3 o`clock.

3147.054 76. Tens intermediate wheel

2130.141 77. Date indicator maintaining plate
Date indicator maintaining plate held by 1 screw 4000.250.

4000.250 78. Screw

3905.070 79. Date jumper spring
Insert the date jumper spring in the provided opening.



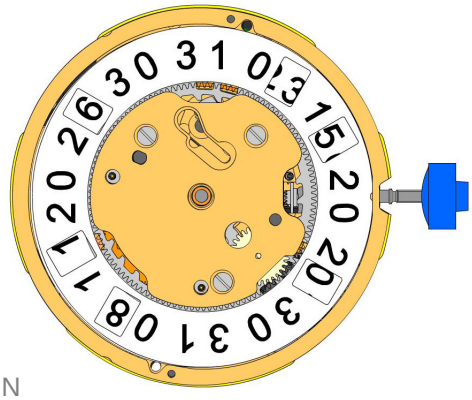
M

3504.216.AF.1.A 80. Tens indicator (standard)
Insert the date jumper spring in the previous opening.

2130.140.G 81. Date mechanism maintaining plate
Date mechanism maintaining plate held by 2 screws 4000.250.

4000.250 82. Screw

3506.072.G 83. Dial support



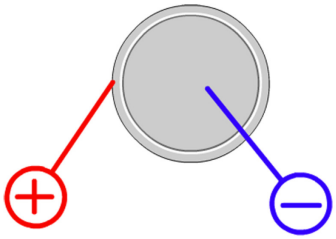
N

8200 84. Moebius 8200

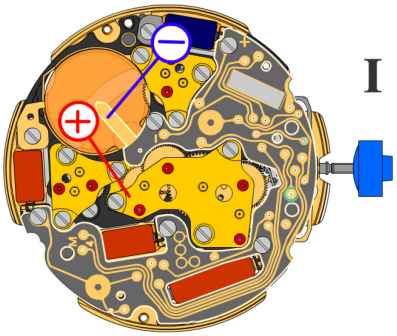
9014 85. Moebius 9014

124 86. Jismaa 124

9020 87. Moebius 9020

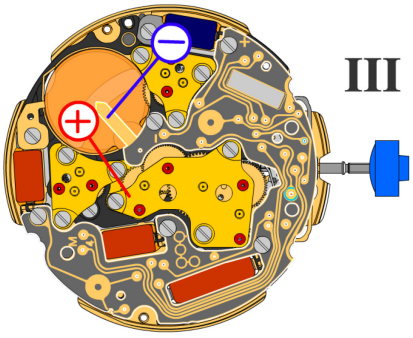


Battery	**395**
Voltage	**1.55 V**



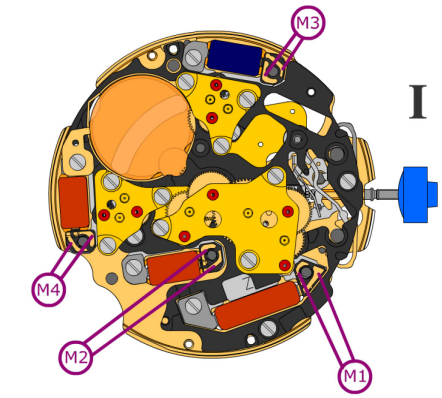
Setting stem in position I, calendar not in gear,
60 s measuring interval for rate and consumption:

Typical consumption	***1.48 µA***
Maximal consumption	***1.65 µA***
Rate	**-10s/M. .. +20s/M.**
Lower working voltage limit	**1.20 V**

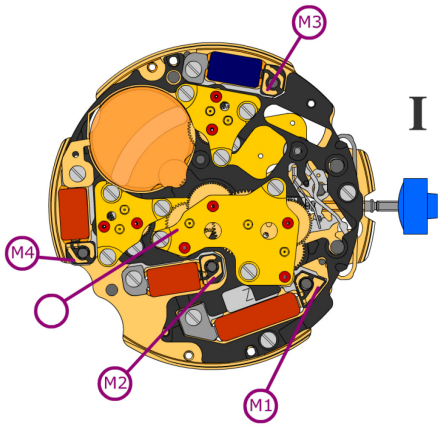


Setting stem in position III, 60 s measuring interval:

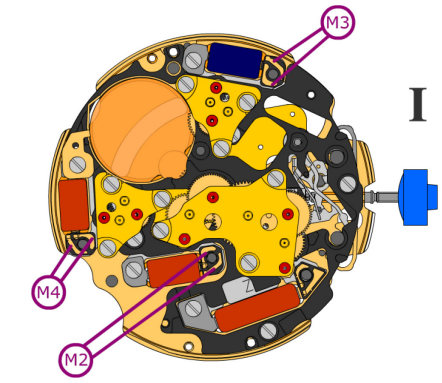
Typical consumption	***0.10 µA***
Maximal consumption	***0.30 µA***



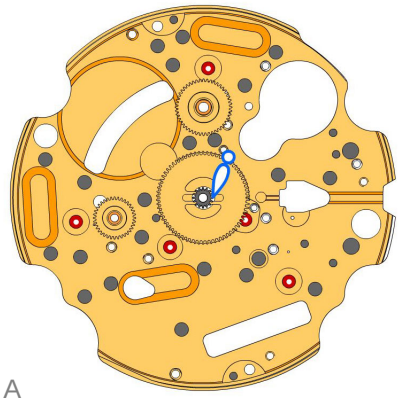
Coil resistance M1	**1.90 kΩ .. 2.10 kΩ**
Coil resistance M2	**1.68 kΩ .. 1.88 kΩ**
Coil resistance M3	**1.68 kΩ .. 1.88 kΩ**
Coil resistance M4	**1.68 kΩ .. 1.88 kΩ**



Coil isolation M1/M2/M3/M4	**∞ kΩ**

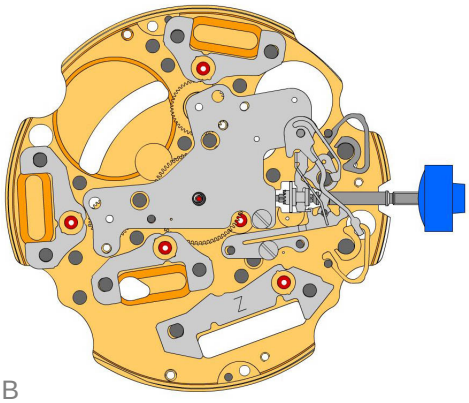


Signal generator (4.9 ms, 8 Hz):	
Lower working voltage limit M2/M3/M4	**1.20 V**

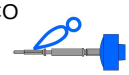


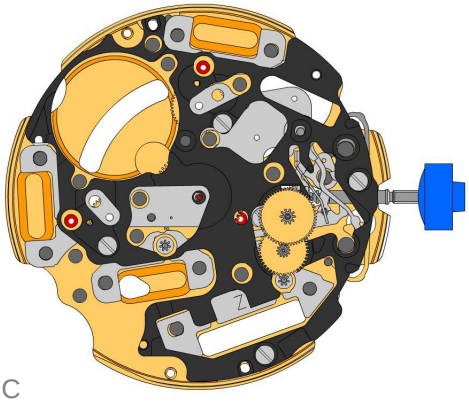
A

2000.574.G 1.		Main plate
3305.282.CO 2.		Cannon pinion with driver (Aig.2)
3301.244.CO 3.		Hour wheel (counter 24h) (Chrono)
3301.243.CO 4.		Hour wheel (counter 12h) (Alarm)



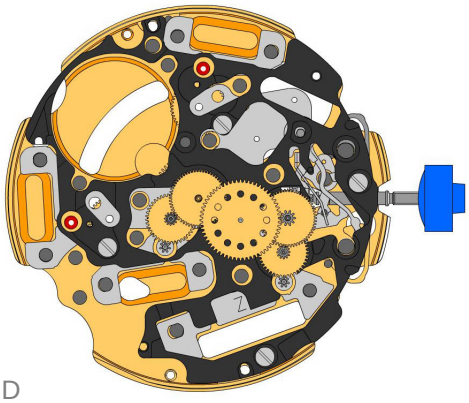
B

2030.024.CO 5.		Centre bridge Centre bridge held by 1 screw 4000.250.
4000.250 6.		Screw
3001.055.FI 7.		Sliding pinion
3000.177.CO 8.		Setting stem
3017.049 9.		Setting lever
3905.049 10.		Setting lever jumper (3 positions) Setting lever jumper held by 1 screw 4000.250.
4000.250 11.		Screw
3015.081 12.		Yoke (3 positions) Parts 3015.081 and 3905.067 must be exchanged together.
3905.067 13.		Yoke spring Tensioning the spring arm.
3406.030 14.		Pusher jumper B Put the grey jumper between the two posts on the further side.
3406.038 15.		Pusher jumper A Put the yellow jumper between the two posts on the closer side.
3622.040 16.		Stator Mark |Z| on stator.
3622.039 17.		Stator (counter 6h, 9h, chrono)
3622.039 18.		Stator (counter 6h, 9h, chrono)
3622.039 19.		Stator (counter 6h, 9h, chrono)



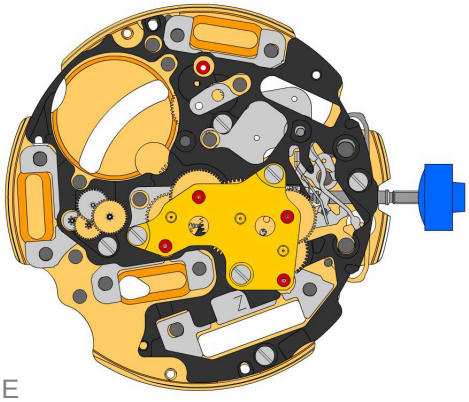
C

3603.079 20.		Plastic bracket Plastic bracket held by 4 screws 4000.250.
4000.250 21.		Screw
3715.094.RK 22.		Rotor
3715.094.RK 23.		Rotor



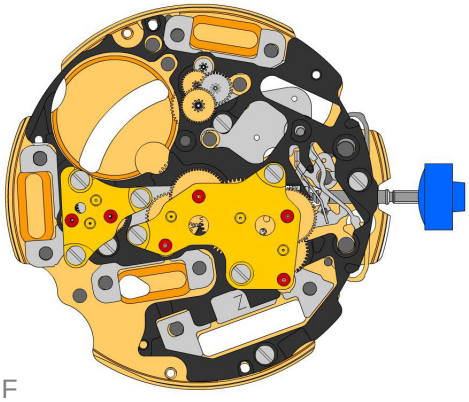
D

3147.046.CO 24.		Intermediate wheel
3136.142.CO 25.		Second wheel (long)
3147.047.CO 26.		Intermediate wheel (chrono)
3136.144.CO 27.		Chronograph wheel (Aig.2)
3122.056.CO 28.		Third wheel



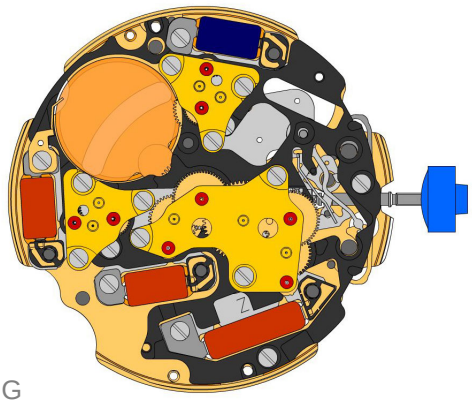
E

2020.148.G 29.		Train wheel bridge Train wheel bridge held by 3 screws 4000.250.
4000.250 30.		Screw
3715.095.RK 31.		Rotor
3147.048.CO 32.		Intermediate wheel (counter)
3007.056.CO 33.		Minute wheel (counter 24h)
3402.008.CO 34.		Minute counting wheel



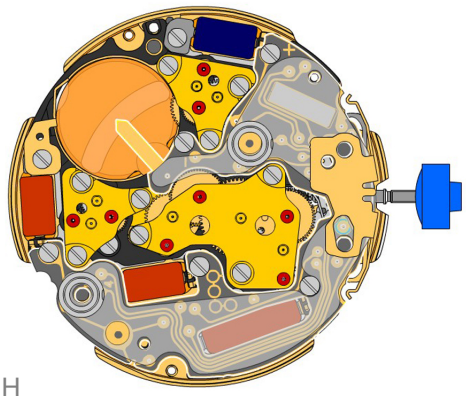
F

2020.149.G 35.		Counter train wheel bridge Train wheel bridge held by 3 screws 4000.250.
4000.250 36.		Screw
3715.095.RK 37.		Rotor
3147.048.CO 38.		Intermediate wheel (counter)
3007.055.CO 39.		Minute wheel (counter 12h)
3402.007.CO 40.		Minute counting wheel

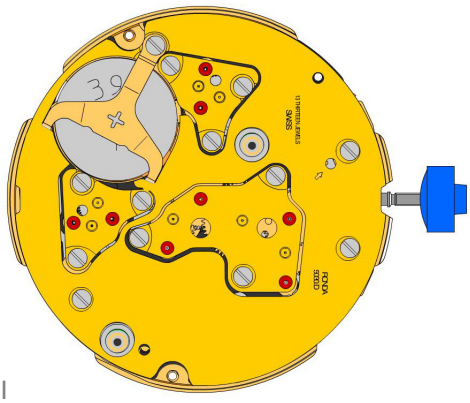


G

2020.149.G 41.		Counter train wheel bridge Train wheel bridge held by 3 screws 4000.250.
4000.250 42.		Screw
3621.053.RK 43.		Coil Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.054.RK 44.		Coil (counter 9h, chrono) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.054.RK 45.		Coil (counter 9h, chrono) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
3621.055.RK 46.		Coil (counter 6h) Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.
4000.250 47.		Screw



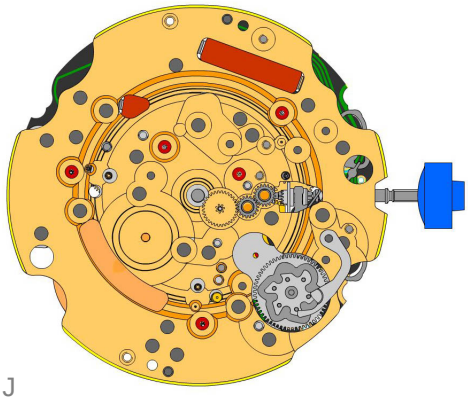
H



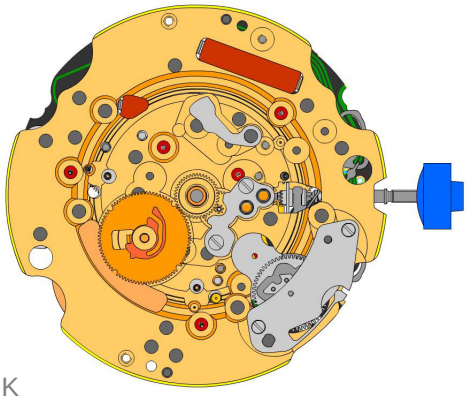
I

3601.118 48.		Contact strip Contact strip held by 1 screw 4000.250.
4000.250 49.		Screw
3603.034 50.		Battery insulator
3612.176.5130 51.		Electronic module Electronic module held by 5 screws 4000.248. Electronic measurements may be realised now.
4000.248 52.		Screw
3603.069 53.		Circuit insulator
3603.070 54.		Contact insulator
3603.070 55.		Contact insulator
3601.107.G 56.		Pusher contact spring

2130.159.G.M01.5130B 57.		Electronic module cover Electronic module cover held by 1 screw 4000.250.
3600.010.HGF 58.		Battery 395
3601.109.G 59.		Bridle + Bridle held by 1 screw 4000.250.
4000.250 60.		Screw

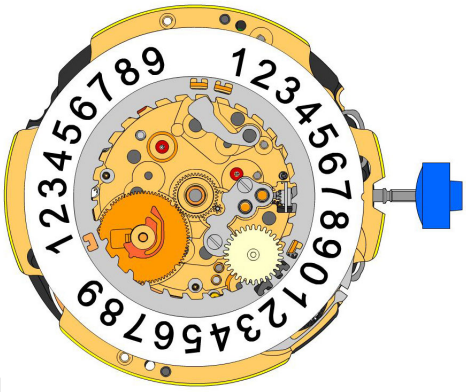


J



K

2000.574.G 61.		Main plate
3004.164 62.		Setting wheel
3004.164 63.		Setting wheel
3007.054.CO 64.		Minute wheel
2130.143 65.		Minute train bridge Minute train bridge held by 3 screws 4000.305.
4000.305 66.		Screw
3004.227 67.		Tens indicator driving wheel The short tooth of the tens indicator driving wheel must point to the center of the movement.
3500.075 68.		Tens jumper
2130.142 69.		Tens jumper maintaining plate Tens jumper maintaining plate held by 2 screws 4000.306. Place the spring loaded bracket outside of the tens jumper.
4010.306 70.		Screw
3301.242 71.		Hour wheel (Aig.1)
3315.016 72.		Friction spring
3004.224.CO 73.		Date indicator driving wheel
3500.049 74.		Date jumper



L

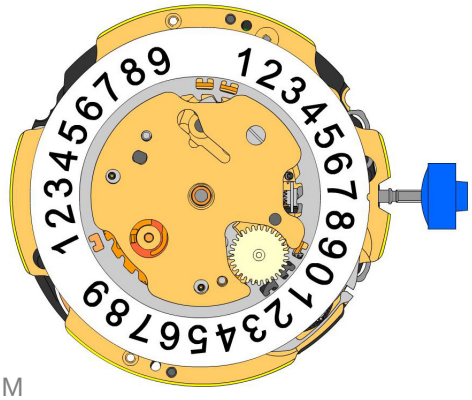
3504.214.AF.1.A 75. 
Units indicator (standard)
Nick of the indicator at 3 o`clock.

3147.054 76. 
Tens intermediate wheel

2130.141 77. 
Date indicator maintaining plate
Date indicator maintaining plate held by 1 screw 4000.250.

4000.250 78.  
Screw

3905.070 79. 
Date jumper spring
Insert the date jumper spring in the provided opening.



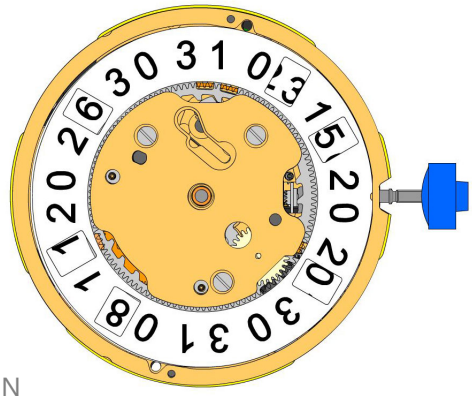
M

3504.216.AF.1.A 80. 
Tens indicator (standard)
Insert the date jumper spring in the previous opening.

2130.140.G 81. 
Date mechanism maintaining plate
Date mechanism maintaining plate held by 2 screws 4000.250.

4000.250 82.  
Screw

3506.072.G 83. 
Dial support



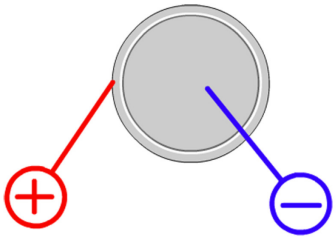
N

8200 84.
Moebius 8200

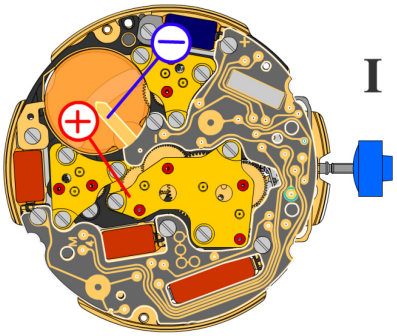
9014 85.
Moebius 9014

124 86.
Jismaa 124

9020 87.
Moebius 9020

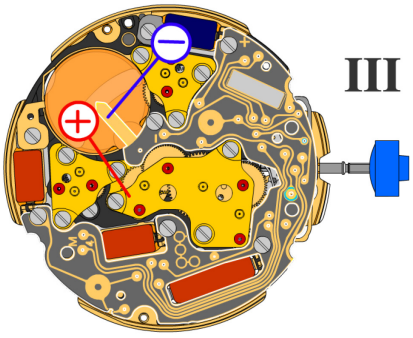


Battery	**395**
Voltage	**1.55 V**



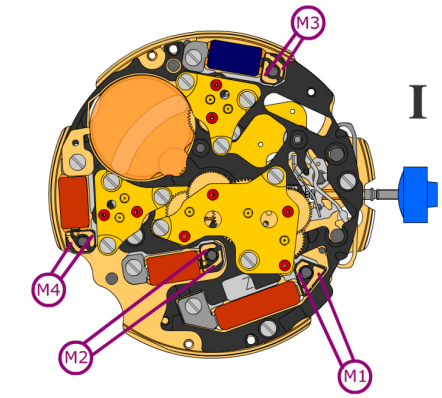
Setting stem in position I, calendar not in gear,
60 s measuring interval for rate and consumption:

Typical consumption	***1.48 µA***
Maximal consumption	***1.65 µA***
Rate	**-10s/M. .. +20s/M.**
Lower working voltage limit	**1.20 V**

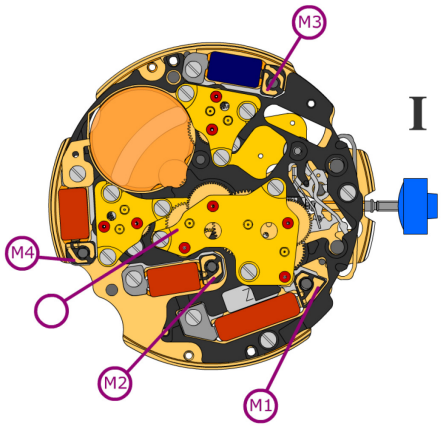


Setting stem in position III, 60 s measuring interval:

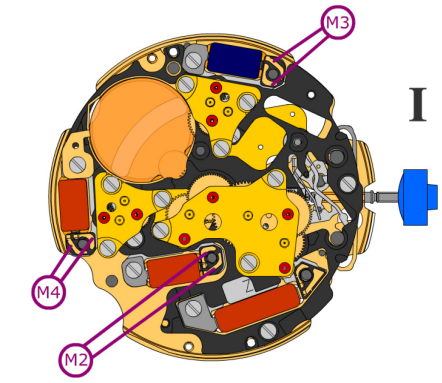
Typical consumption	***0.10 µA***
Maximal consumption	***0.30 µA***



Coil resistance M1	**1.90 kΩ .. 2.10 kΩ**
Coil resistance M2	**1.68 kΩ .. 1.88 kΩ**
Coil resistance M3	**1.68 kΩ .. 1.88 kΩ**
Coil resistance M4	**1.68 kΩ .. 1.88 kΩ**



Coil isolation M1/M2/M3/M4	**∞ kΩ**



Signal generator (4.9 ms, 8 Hz):	
Lower working voltage limit M2/M3/M4	**1.20 V**