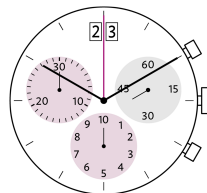
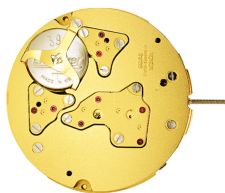


# Quartz Movements

## 计时功能

### 朗达 明星系列

型号 5040.B - 12□”



## 产品规格

指针式石英机芯

系列

明星系列

型号

5040.B

尺寸

12□”

版本 瑞士制造

13 钻石 / 金色

版本 瑞士零件 远东组装

6 钻石 / 银色

电池寿命

54 月

标准针高

1

## 特点

- 针高1及2
- 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

- 30分钟计时小眼
- 中心大秒计时（1/1秒）
- 10小时计时小眼
- 1/10 秒计时直至30分钟
- 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 5040.B - 12□”

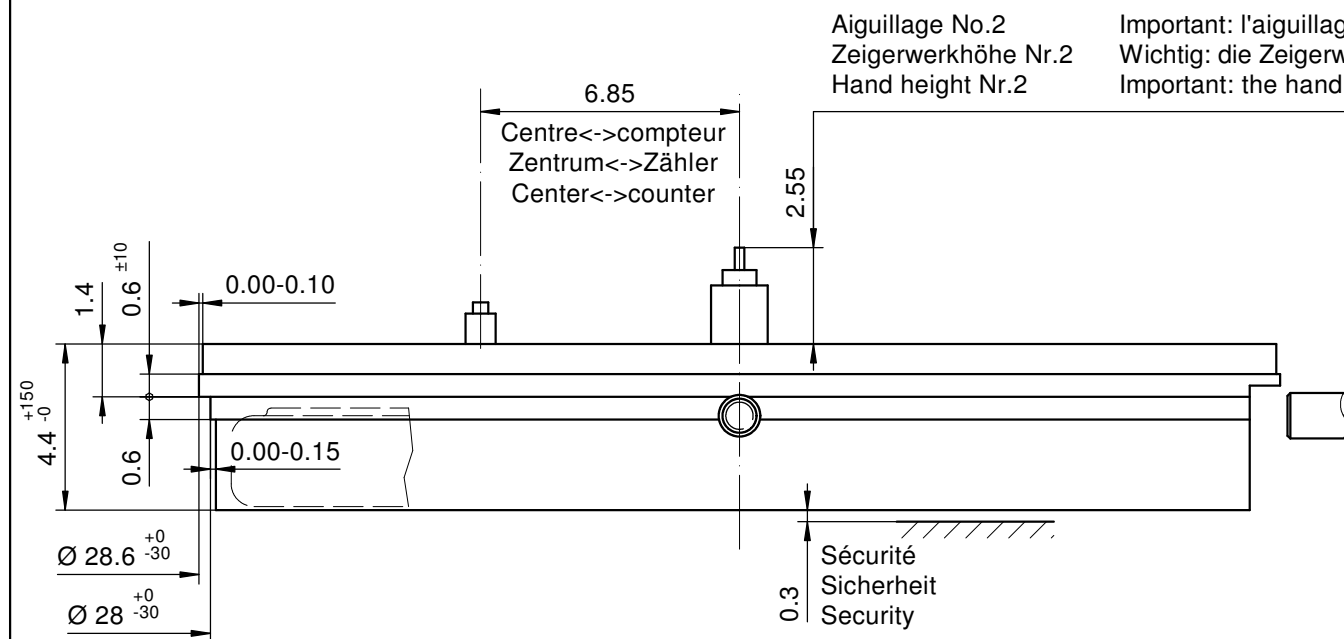
#### 技术规格

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 $\mu$ Nm
分针运行扭力 - 一般情况下	300 $\mu$ Nm
计时大秒针运行扭力 - 一般情况下	7 $\mu$ 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 395
电池寿命	54 月
电压	1.5 V
电耗 - 一般情况下	1.32 $\mu$ A (日历不在跳动当中)
电耗 - 上限	1.65 $\mu$ A (日历不在跳动当中)



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

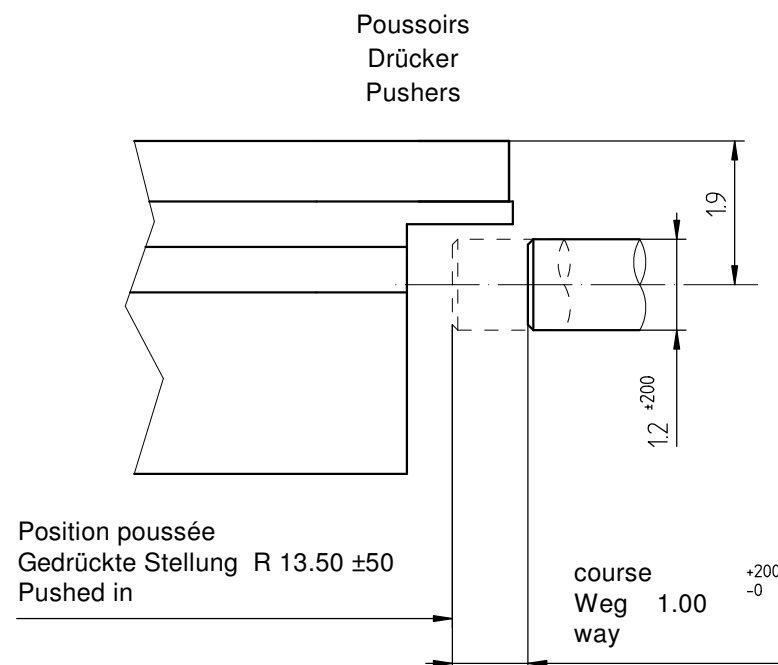
Sécurité entre l'aiguille des secondes et le verre:  
Sicherheit zwischen Sekundenzeiger und Glas: 0.30mm  
Security between second hand and glass:

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 contrôlée.

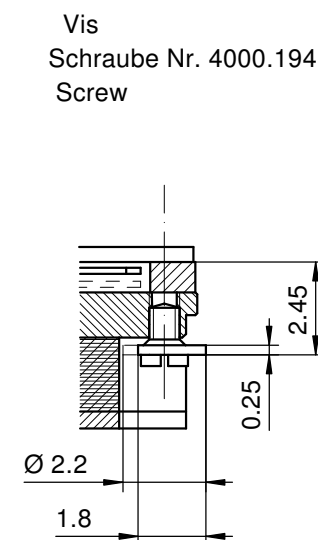
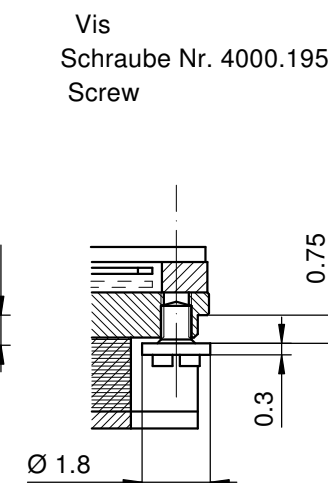
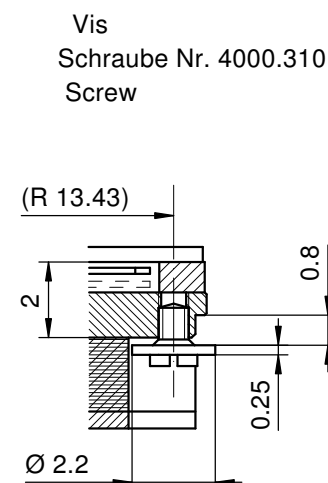
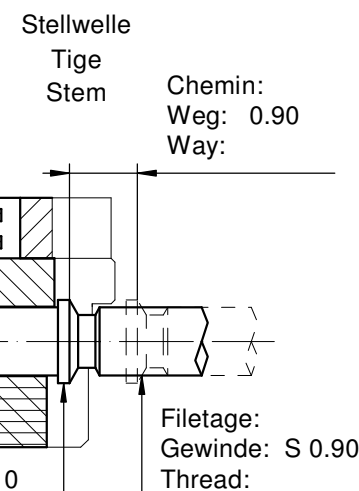
Die Weglänge des Drückers ist im Drücker selbst zu begrenzen. In der gedrückten Stellung ist seine Position zu kontrollieren

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



Côté fond de boîte  
Seite Gehäuseboden  
Case back side  
Position pour extraire la tige  
Position zum Entfernen der Stellwelle  
Position to remove the stem

Pile  
Batterie (395) Ø 9.50 x 2.60mm  
Battery



Dégagement cercle d'entourage pour poussoir  
Freistellung Gehäuse ring 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 poussoirs 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 fulfilled. For pusher angles of 0° (pusher A and B), see drawing 5000.345.

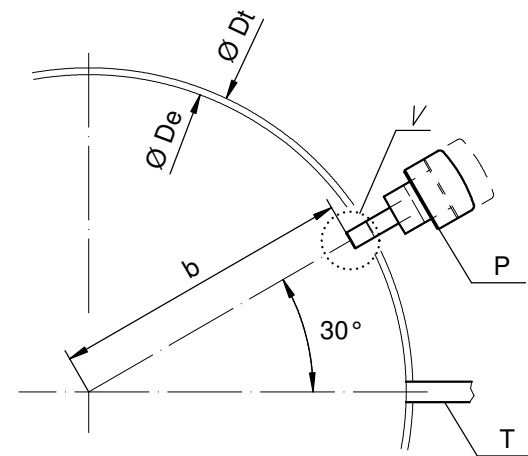
Cage  
Uhrwerkgestell 12½"  
Frame

RONDA

5040.B, 5040.D, 5030.D, 5021.D, 5040.E

Issued	08 Jan 2001	mg
Modified	31 Aug 2016 ÄA 34777	dh
Released	YES	
Tolerance	+/- 20 µm	
Scale	10 : 1 (5 : 1) (A3H)	
Sous réserve de modifications Äenderungen vorbehalten Modifications reserved		
No.	5000.315	10

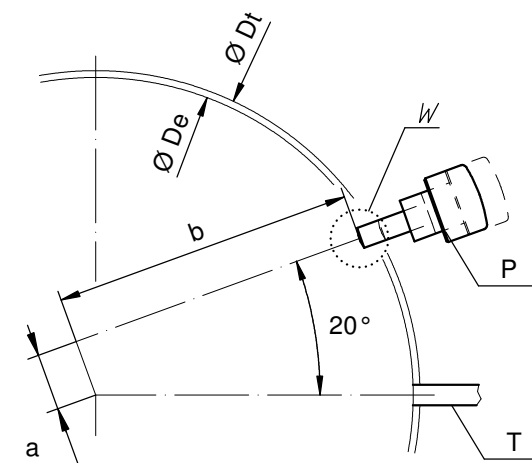
Angle Winkel Angle	30°	
Ø Dp	b	
1.00	13.50	
1.10	13.50	
1.20	13.50	
1.30	13.50	
1.40	13.50	



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



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

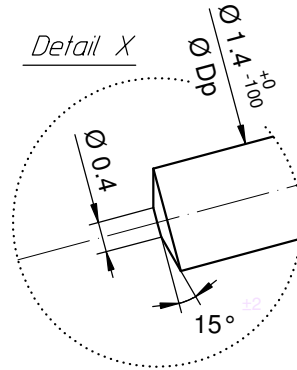
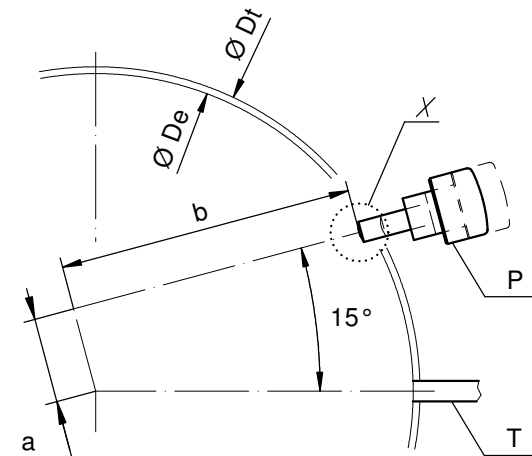
Ø Dp: diamètre du poussoir  
Drückerdurchmesser  
pusher-diameter

Ø Dt: diamètre total  
Totaldurchmesser  
total-diameter

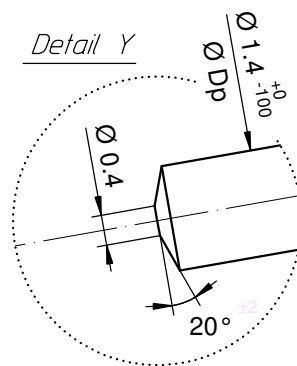
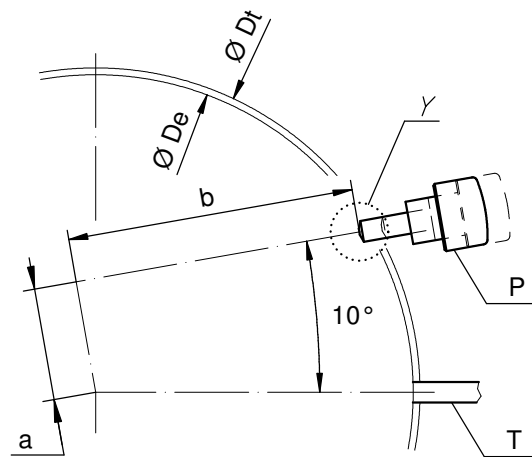
P: poussoir en position poussée  
Drücker in gedrückter Stellung  
pusher in pressed position

T: tige de mise à l'heure  
Stellwelle  
stem

Angle 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



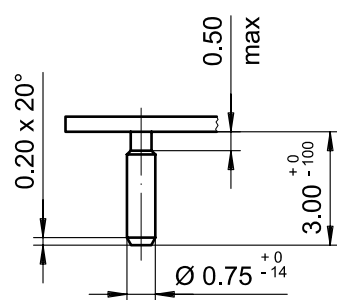
Angle des poussoirs A et B  
Winkel der Drücker A und B  
Angle of pusher A and B

RONDA

4xxx.x, 5xxx.x

Issued	06 Sep 2004	mk
Modified	30.März 2005 ÄA 1784	mk
Released	YES	
Tolerance	+/- 20 µm	
Scale	10 : 1 (5 : 1) (A3H)	
Sous réserve de modifications Äenderungen vorbehalten Modifications reserved		
No.	5000.345	01

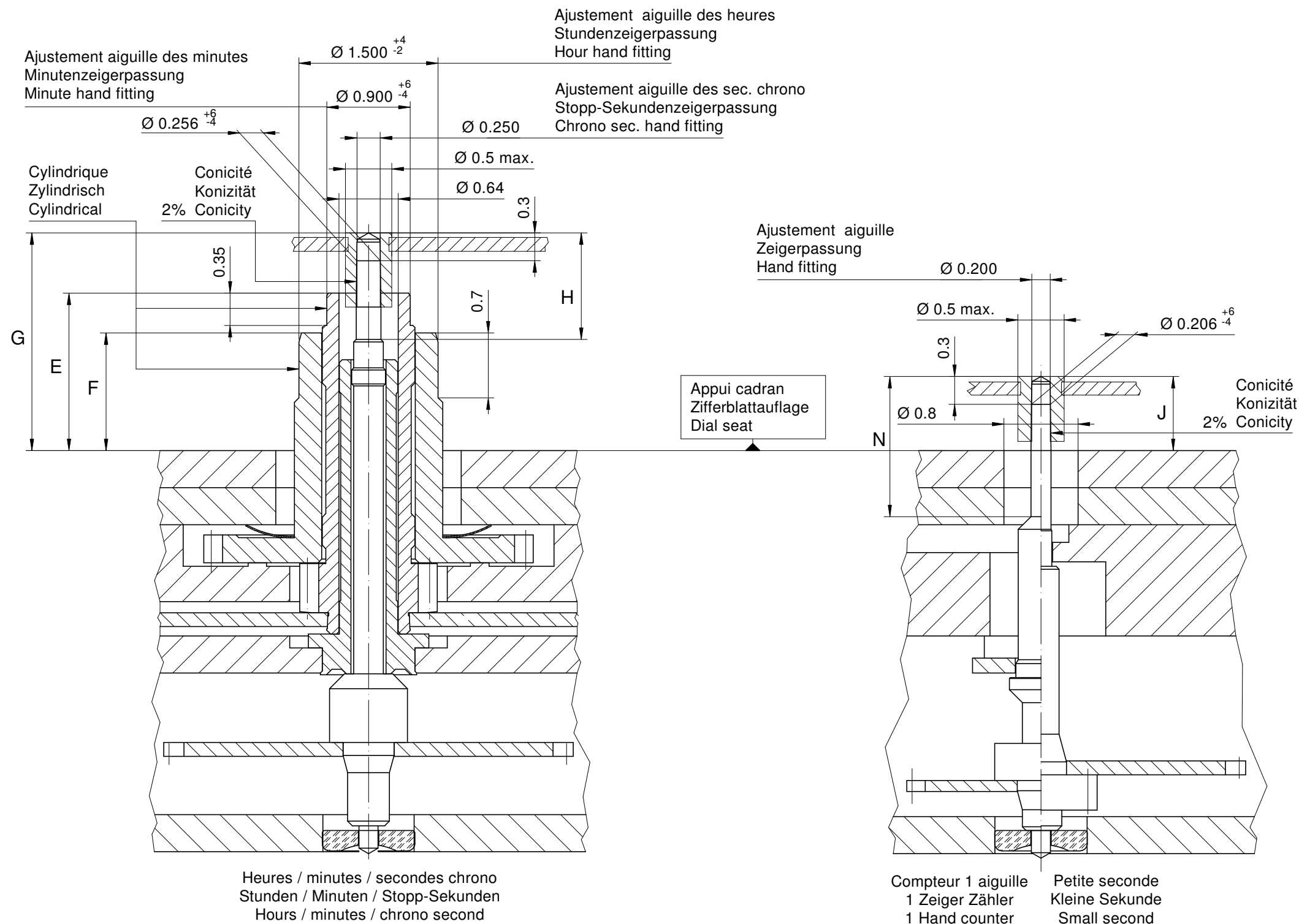




Tige	Date
Stellw.	Datum
Stem	Date
3H	12H
	<input type="text"/>

12½"

Issued	13 Dez 2006	cw
Modified	15.Dez.2006 ÄÄ ----	cm
Released	YES	
Tolerance	+/- 20 µm	
Scale	5 : 1 (A4V)	
Sous réserve de modifications Äenderungen vorbehalten Modifications reserved		
No.	5010.692	03



Aiguillages Zeigerwerkhöhe Hand fitting height							
Dépassement Höhe über Zifferblattaufgabe Height over dial seat							
No	Pignon des secondes chrono Stopp-Sekundentrieb Chrono second pinion	Chaussée Minutenrohr Cannon-pinion	Roue des heures Stundenrad Hour wheel			Petite seconde Kleine Sekunde Small second	1 aig. 1 Zeiger 1 Hand
	G	E	F	H	N	J	J
1	2.35	1.70	1.27	1.37	1.50	0.80	0.80
2	2.85	2.20	1.77	1.87	1.05	1.30	1.30

Aiguillages Zeigerwerkhöhe Hand fitting height						
Peinture comprise / inkl. Farbe / Paint included						
Epaisseur maximum du cadran Maximale Zifferblattdicke Maximum dial thickness						
No	Sous l'aiguille des 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 de petite seconde Unter kleine Sekundenzeiger Under small second hand	Sous l'aiguille compteur 1 aiguille Unter Zeiger 1 Zeiger Zähler Under hand 1 hand counter	Epaisseur des aiguilles Zeigerdicke Hands thickness
1	1.85	1.30	0.85	0.40	0.40	0.15
2	2.35	1.80	1.35	0.90	0.90	0.15

		Aig. des sec. chrono Stopp-Sekundenzeiger Chrono second hand	Aig. des minutes Minutenzeiger Minute hand	Aig. des heures Stundenzeiger Hour hand	Aig. petite secondes Kleine Sekundenzeiger Small second hand	Aiguille compteur (1 aig.) Zähler Zeiger (1 Zeiger) Counter hand (1 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	Masse / Masse / Weight *
μNm	max.	0.06	0.80	0.80	0.07	0.02	Balourd / Unwucht / Unbalance *
gmm <sup>2</sup>	max.	1.0	-	-	0.4	1.0	Inertie / Massenträgheit / Inertia *
N	max.	30	40	40	30	30	Force de chassage / Aufpresskraft / Force

Aiguillages Zeigerwerkhöhen 12½" Hand fitting heights		Issued	30 Sep 2002	mg
		Modified	15 Okt 2014 ÄA 13275	dh
		Released	Yes	
		Tolerance	µm	
		Scale	20 : 1 (A3H)	
RONDA	5040.B, 5040.D, 5040.E	Sous réserve de modifications Äenderungen vorbehalten Modifications reserved		
		No.	3316.075	08

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

\* Bei abweichenden Werten, bitte technischen Kundendienst anfragen

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



Tige de travail (intégrée dans le mouvement)  
Arbeitsstellwelle (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



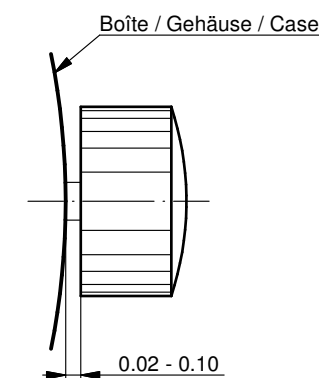
Couleur de la couronne Kronenfarbe Crown color	bleu foncé dunkelblau dark blue
Code	UN 5002

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

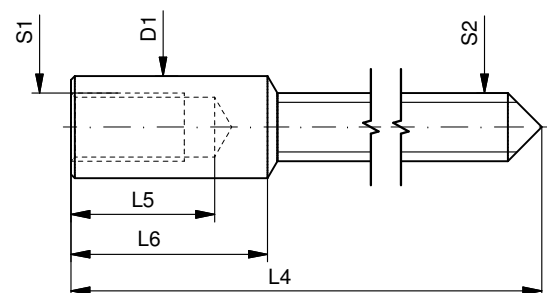


Couronne vissée  
Geschraubte Krone  
Screwed crown

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 (dimensions / forces)  
Stellwelle (Dimensionen / Kräfte)  
Stem (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  
Änderungen vorbehalten  
Modifications reserved

No.	5030.019	01
-----	----------	----



**Werkhalter**  
Stellwelle entfernen  
H5XXX.1T



**Werkhalter**  
Zeiger setzen  
H5XXX.1A

## Zifferblatt- und Zeigersetzen

- Krone in Position II
- Krone drehen bis das Datum 02 erscheint
- Krone in Position III
- Stundenzeiger vorwärts drehen bis das Datum auf 03 wechselt
- Arbeitszeiger entfernen
- Zifferblatt setzen
- Alle Zeiger in Richtung 12 Uhr setzen
- Uhrzeit einstellen
- Nullstellung der Chronographenzeiger\*
- Krone in Position II
- Datum einstellen
- Krone in Position I

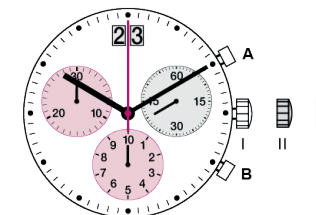
## Datumsschaltdauer

Einer- und Zehnerscheibe

~2h

## \*Nullstellung der Chronographenzeiger

- Drücker A und B für 2 Sekunden gleichzeitig betätigen  
(Chrono-Sekundenzeiger dreht sich einmal)
- Drücker A → Korrektur der Chronosekunde
- Drücker B → Sprung zum Stundenzähler
- Drücker A → Korrektur der Zählerposition
- Drücker B → Sprung zum Minutenzähler
- Drücker A → Korrektur der Zählerposition



## Allgemeine Hinweise

Das Entfernen der Stellwelle kann ausschliesslich in Pos. I erfolgen.

Zum Setzen der Zeiger ist die Verwendung von Abstützschrauben unerlässlich.

Zulässige Zeigersetzkkräfte:

Std.- / Min.-Zeiger: <40N

Übrige Zeiger: <30N

Während der Schnellkorrektur des Datums (Stellwelle in Position II) darf eine Kalenderschaltgeschwindigkeit von 5 d/s nicht überschritten werden.

朗达 明星系列 - 机芯型号 5040.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

显示项目

控制按钮

按钮 A

按钮 B

把的

日曆

秒针

分针

时针

中心秒针

分钟计

1/10 秒计 (开头的30秒钟转动) 30分钟后转为小时计

01

设定时间

1 把的拉至位置 III (腕表停止运行)。

2 转动把的至正确时间 8:45。

3\* 推把的回位置 I

注意:

为了设定准确的秒数, 当秒针指向 .60。拉把的设定是完小时及分钟后, 必须在正确的秒数把把的推回位置 I

02

设定日期 (快速模式)

1 把的拉至位置 II (腕表 继续运行)。

2 转动把的至正确日期 01。

3\* 推把的回位置 I。

注意:

9 PM至12 PM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。

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

03

更换电池后设定日期/时间

例子:

— 腕表上的日期/时间 17 / 1:25 AM

— 现在的日期/时间 04 / 8:30 PM

1 把的拉至位置 II (腕表继续运行)。

2 转动把的至昨日日期 04。

3\* 继续转动把的至正确日期 04。

4 继续转动把的至正确时间 8:30 PM

5\*\* 继续转动把的至正确时间 8:30 PM

6 将把的推回位置 I

注意:

\* 为了设定至准确的秒数 请参阅节录 « 设定时间 »

\*\* 请注意腕表上的 AM/PM 模式

04

计时器 (基本功能)

(开始 / 停止 / 还原)

例子:

1 开始: 按下按钮 A

2 停止: 再按下按钮 A 停止计时, 然后阅读计时计: 4 分钟 / 38 秒 / 7/10 秒

3 返回零位置: 按下按钮 B (计时指针会还原到零位置)

05

计时器: 计算累积时间

例子:

1 开始: (开始计时)

2 停止: (例子: 15 分 5 秒 1 后)

3 再开始: 继续计时

4\* 停止: (例子: 5 分 12 秒 3 后) = 20 分 17 秒 (显示累积计算时间)

5 还原: (计时指针会还原到零位置)。

注意:

\* 步骤 1 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, ...)

06

计时器: 计算分段时间

例子

1 开始: (开始计时)

2 显示分段时间: 例子 20 分钟 17 秒 (指针停止, 计时器仍然在背 后运行)

3 追时: (计时指针会迅速到达持续计算的时间)。

4 停止: (显示最后的时间)

5 还原: (计时指针返回零位置)

注意:

\* 步骤 1 后, 可再按下按钮 B 继续计算分段时间 (显示分段时间 / 追时, ...)

07

调较计时指针到零位置

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)。

1 把的拉至位置 III (计时指针在 / 不在零位置)。

2 同时 & 持续按下按钮 A 及 B 最少 2 秒 (中心秒针会转动 360° → 修正模式启动)。

08

调较中心秒针

单步前进 1x 短按

连续前进 长按

调较下一支指针 B

调较 1/10 秒计 (6 时位置)

单步前进 1x 短按

连续前进 长按

调较下一支指针 B

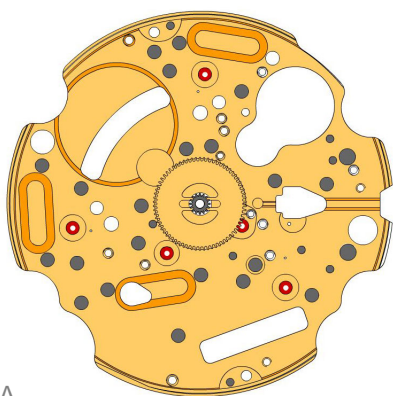
调较分钟计 (9 时位置)

单步前进 1x 短按

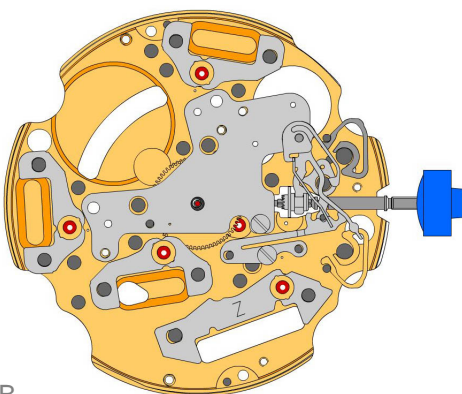
连续前进 长按

推把的回位置 I 结束调较计时指针 (能在任何时候执行)。


















08

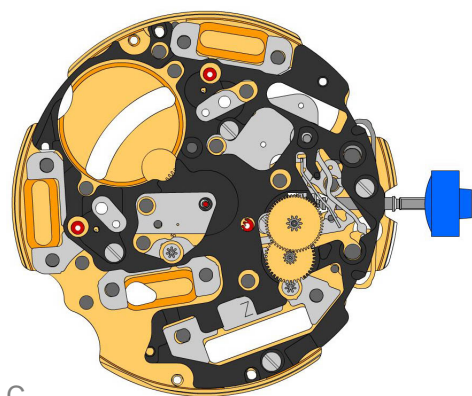


A



B

2000.574.G 1.		Main plate
3305.275.CO 2.		Cannon pinion with driver (Aig.1)
2030.017.CO 3.		Centre bridge Centre bridge held by 1 screw 4000.250. Parts 2030.017.CO, 3402.009.CO, 3004.223 and 3500.59 must be exchanged together.
4000.250 4.		Screw
3001.055.FI 5.		Sliding pinion
3000.177.CO 6.		Setting stem
3017.049 7.		Setting lever
3905.049 8.		Setting lever jumper (3 positions) Setting lever jumper held by 1 screw 4000.250.
4000.250 9.		Screw
3015.081 10.		Yoke (3 positions) Parts 3015.081 and 3905.067 must be exchanged together.
3905.067 11.		Yoke spring Tensioning the spring arm. Parts 3015.081 and 3905.067 must be exchanged together.
3406.030 12.		Pusher jumper B Put the grey jumper between the two posts on the further side.
3406.038 13.		Pusher jumper A Put the yellow jumper between the two posts on the closer side.
3622.040 14.		Stator Mark [Z] on stator.
3622.039 15.		Stator (counter 6h, 9h, chrono)
3622.039 16.		Stator (counter 6h, 9h, chrono)
3622.039 17.		Stator (counter 6h, 9h, chrono)



C


3603.079  
18.  Plastic bracket  
Plastic bracket held by 4 screws 4000.250.

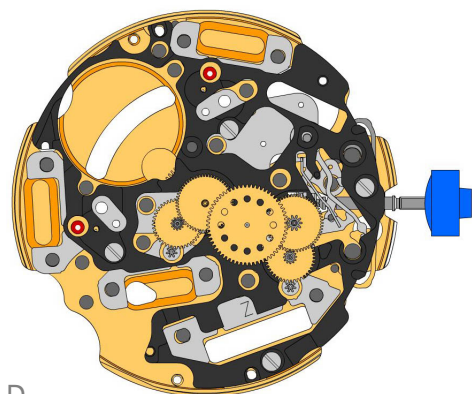
4000.250  
19.  Screw

3715.094.RK  
20.  Rotor


3715.094.RK  
21.  Rotor


3147.046.CO  
22.  Intermediate wheel

3136.142.CO  
23.  Second wheel (long)

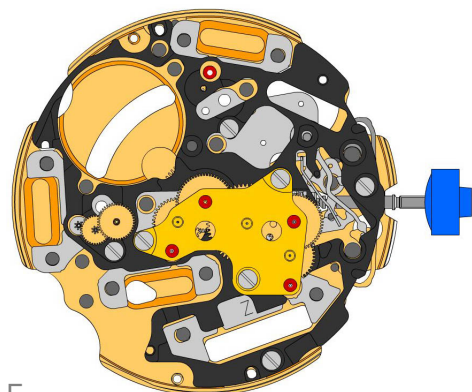


D


3147.047.CO  
24.  Intermediate wheel (chrono)

3136.143.CO  
25.  Chronograph wheel (Aig.1)

3122.056.CO  
26.  Third wheel




E

2020.148.G  
27.  Train wheel bridge  
Train wheel bridge held by 3 screws 4000.250.

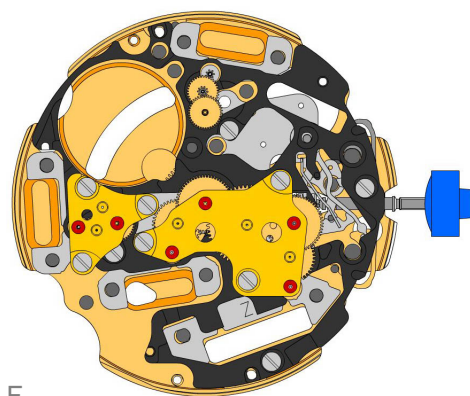
4000.250  
28.  Screw

3715.095.RK  
29.  Rotor

3147.048.CO  
30.  Intermediate wheel (counter)

3402.006.CO  
31.  Minute counting wheel





F

2020.149.G  
32.



Counter train wheel bridge  
Counter train wheel bridge held by 3 screws 4000.250.

4000.250  
33.



Screw

3715.095.RK  
34.



Rotor

3147.053.CO  
35.

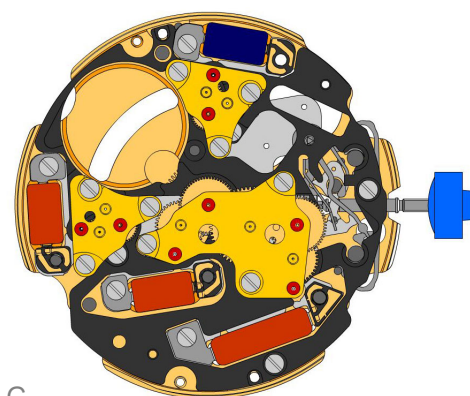


Intermediate wheel (counter 1/10sec)

3402.009.CO  
36.



Counting wheel 1/10 sec  
Parts 2030.017.CO, 3402.009.CO, 3004.223 and 3500.59 must be exchanged together.



G

2020.149.G  
37.



Counter train wheel bridge  
Counter train wheel bridge held by 3 screws 4000.250.

4000.250  
38.



Screw

3621.053.RK  
39.



Coil  
Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.

3621.054.RK  
40.



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  
41.



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  
42.

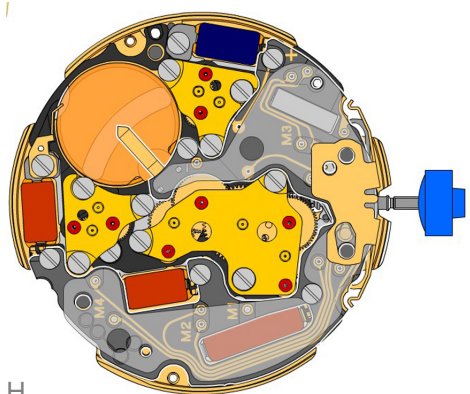


Coil (counter 6h)  
Attention: Please hold the coil only on the grey coil core. Coil held by 1 screw 4000.250.

4000.250  
43.



Screw



H

3601.118  
44.



Contact strip  
Contact strip held by 1 screw 4000.250.

4000.250  
45.



Screw

3603.034  
46.



Battery insulator

3612.144.5040  
47.



Electronic module  
Electronic module held by 5 screws 4000.248. Electronic measurements may be realised now.

4000.248  
48.



Screw

3603.069  
49.



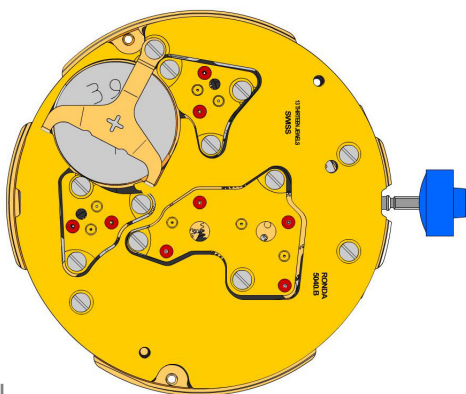
Circuit insulator

3601.107.G  
50.



Pusher contact spring





2130.137.G.M01.5040B  
51.



**Electronic module cover**  
Electronic module cover held by 3 screws 4000.250.

3600.010.HGF  
52.



**Battery 395**

3601.109.G  
53.

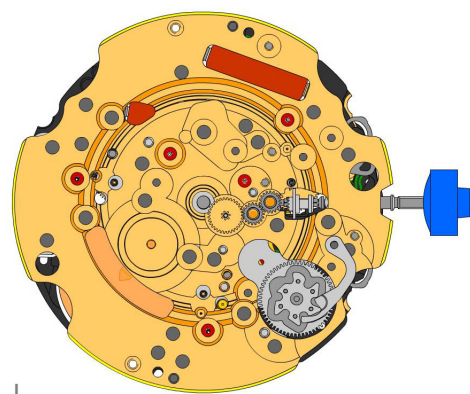


**Bridge +**  
Bridge held by 1 screw 4000.250.

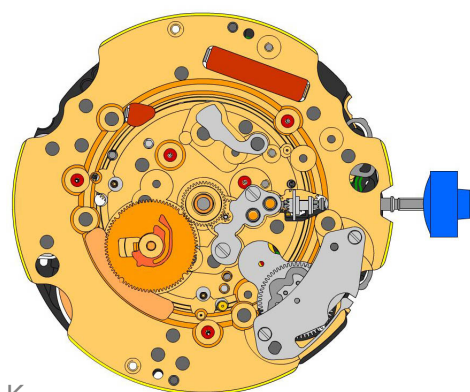
4000.250  
54.

















**Screw**

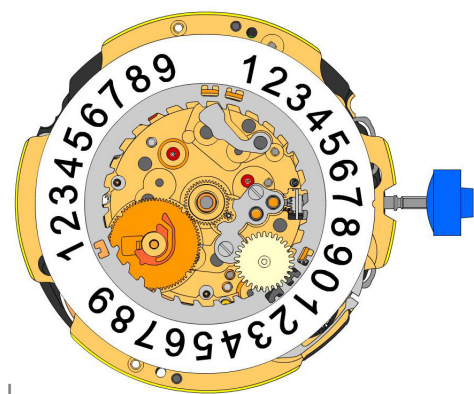


J



K

2000.574.G 55.		Main plate
3004.164 56.		Setting wheel
3004.164 57.		Setting wheel
3007.054.CO 58.		Minute wheel
2130.143 59.		Minute train bridge Minute train bridge held by 2 screws 4000.305.
4000.305 60.		Screw
3004.223 61.		<b>Tens indicator driving wheel</b> Parts 2030.017.CO, 3402.009.CO, 3004.223 and 3500.59 must be exchanged together. The short tooth of the tens indicator driving wheel must point to the center of the movement.
3500.075 62.		<b>Tens jumper</b> Parts 2030.017.CO, 3402.009.CO, 3004.223 and 3500.59 must be exchanged together.
2130.142 63.		Tens jumper maintaining plate Tensioning the spring arm. Tens jumper maintaining plate held by 2 screws 4000.306.
4010.306 64.		Screw
3301.241 65.		Hour wheel (Fig.1)
3315.016 66.		Friction spring
3004.224.CO 67.		Date indicator driving wheel
3500.049 68.		Date jumper



L

3504.214.AF.1.A  
69. Units indicator (standard)



3147.054  
70. Tens intermediate wheel



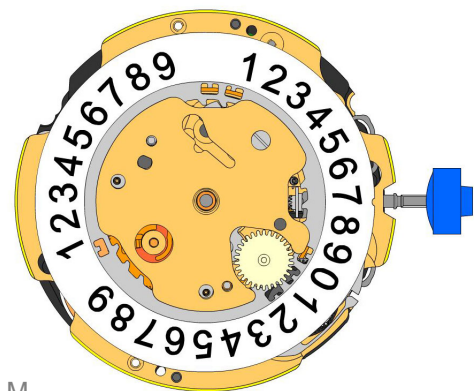
2130.141  
71. Date indicator maintaining plate  
Date indicator maintaining plate



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



3504.216.AF.1.A  
73. Tens indicator (standard)  
Nick of the indicator at 3 o'clock.



M

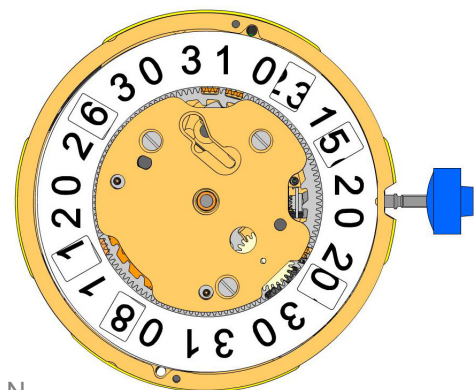
2130.140.G  
74. Date mechanism maintaining plate  
Date mechanism maintaining plate held by 2 screws 4000.250



4000.250  
75. Screw



3506.072.G  
76. Dial support



N

8200  
77. Moebius 8200



9014  
78. Moebius 9014



124  
79. Jismaa 124

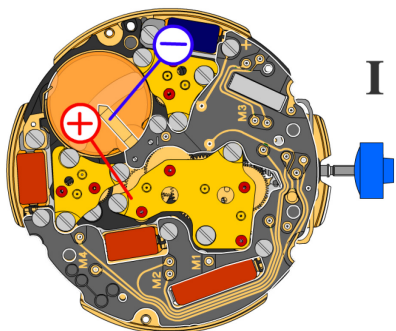


9020  
80. Moebius 9020



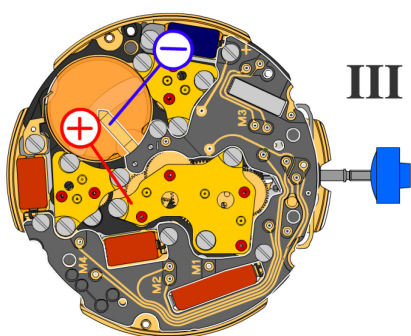


Battery	<b>395</b>
Voltage	<b>1.55 V</b>



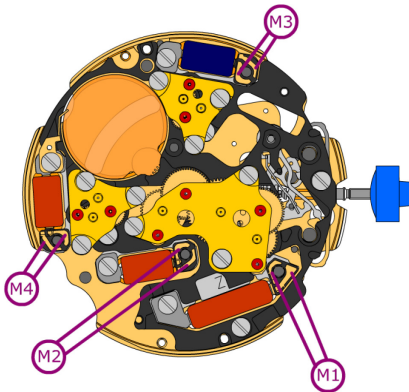
*Setting stem in position I, calendar not in gear,  
60 s measuring interval for rate and consumption:*

Typical consumption	<b>1.32 <math>\mu</math>A</b>
Maximal consumption	<b>1.65 <math>\mu</math>A</b>
Rate	<b>-10s/M. .. +20s/M.</b>
Lower working voltage limit	<b>1.20 V</b>



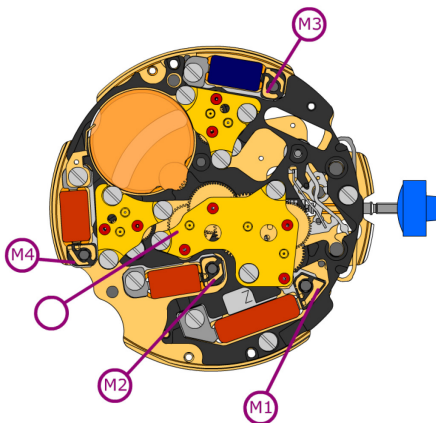
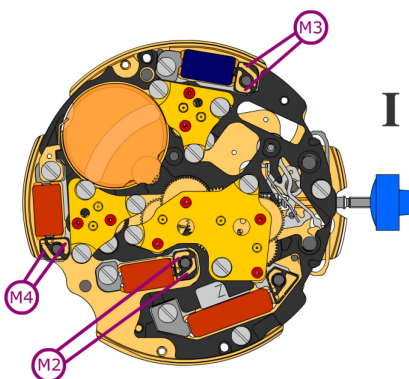
*Setting stem in position III, 60 s measuring interval:*

Typical consumption	<b>0.10 <math>\mu</math>A</b>
Maximal consumption	<b>0.30 <math>\mu</math>A</b>

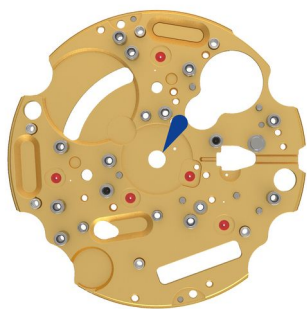

Coil resistance M1 **1.90 k $\Omega$  .. 2.10 k $\Omega$** 



Coil resistance M2 **1.68 k $\Omega$  .. 1.88 k $\Omega$** 

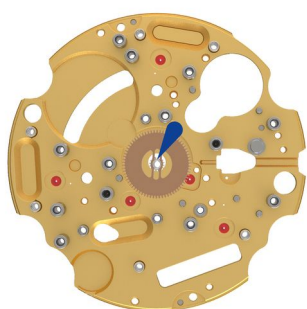
Coil resistance M3 **1.68 k $\Omega$  .. 1.88 k $\Omega$** 



Coil resistance M4 **1.68 k $\Omega$  .. 1.88 k $\Omega$** 

Coil isolation M1/M2/M3/M4  **$\infty$  k $\Omega$** 

*Signal generator (4.9 ms, 8 Hz):*

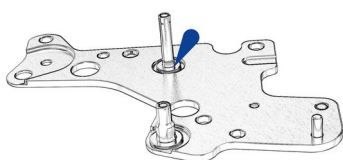
Lower working voltage limit  
M2/M3/M4 **1.20 V**



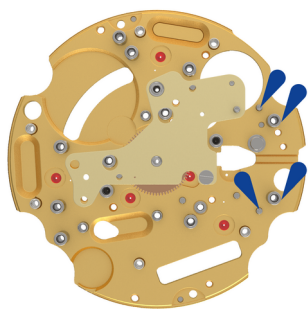
- |   |   |            |              |
|---|---|------------|--------------|
| 1 |  | 2000.574.G | Main plate   |
| 2 |  | 8200       | Moebius 8200 |






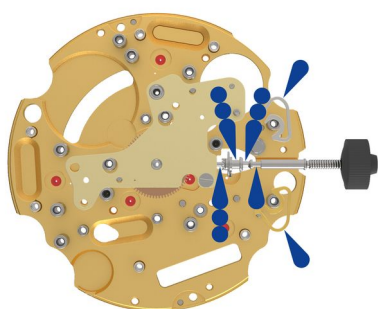
- |   |   |             |                      |
|---|---|-------------|----------------------|
| 3 |  | 3305.275.CO | Cannon pinion (Aig.) |
| 4 |  | 8200        | Moebius 8200         |








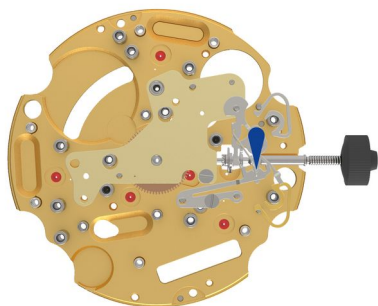
- |   |   |      |              |
|---|---|------|--------------|
| 5 |  | 8200 | Moebius 8200 |
|---|---|------|--------------|








- |   |   |             |               |
|---|---|-------------|---------------|
| 6 |  | 2030.032.CO | Center bridge |
| 7 |  | 4000.250    | Schraube      |
| 8 |  | 8200        | Moebius 8200  |

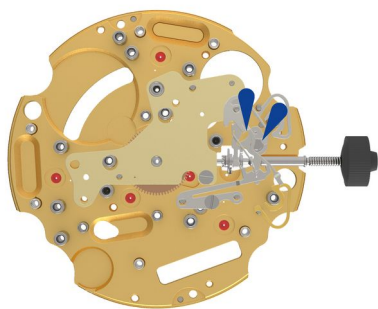




- |    |   |             |   |
|----|---|-------------|---|
| 9  |    | 3406.038    | Pusher jumper A<br>Put the yellow jumper between the two pillars. |
| 10 |    | 3406.030    | Push jumper B<br>Put the grey jumper between the two pillars.     |
| 11 |    | 3000.177.CO | Working stem  |
| 12 |  | 3001.055.FI | Sliding pinion  |
| 13 |  | 8200 / 9020 | Moebius 8200 / Moebius 9020                                       |

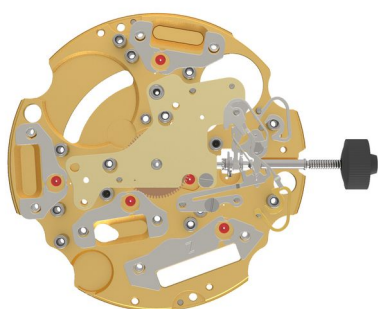






- |    |   |          |                      |
|----|---|----------|----------------------|
| 14 |  | 3017.049 | Setting lever        |
| 15 |  | 3905.049 | Setting lever jumper |
| 16 |  | 4000.250 | Schraube             |
| 17 |  | 3015.081 | Yoke                 |
| 18 |  | 8200     | Moebius 8200         |

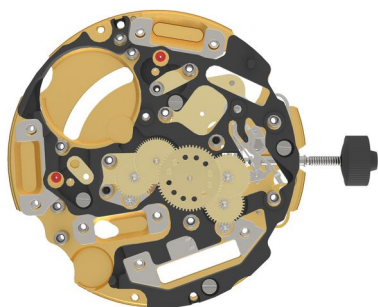












- |    |   |          |   |
|----|---|----------|---|
| 19 |  | 3905.067 | Yoke spring<br>Tensioning the spring arm. |
| 20 |  | 8200     | Moebius 8200                              |











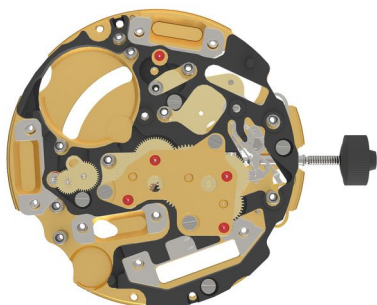
- |    |   |          |                               |
|----|---|----------|-------------------------------|
| 21 |    | 3622.040 | Stator<br>Mark "Z" on stator. |
| 22 |    | 3622.039 | Stator                        |
| 23 |    | 3622.039 | Stator                        |
| 24 |  | 3622.039 | Stator                        |
















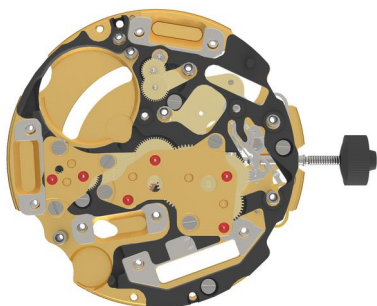
- |    |   |             |                             |
|----|---|-------------|-----------------------------|
| 25 |  | 3603.079    | Plastic bracket             |
| 26 |  | 4000.250    | Schraube                    |
| 27 |  | 4000.250    | Schraube                    |
| 28 |  | 4000.250    | Schraube                    |
| 29 |  | 4000.250    | Schraube                    |
| 30 |  | 3715.094.RK | Rotor                       |
| 31 |  | 3147.047.CO | Intermediate wheel (chrono) |
| 32 |  | 3136.143.CO | Chronograph wheel (Aig.)    |
















33			3715.094.RK	Rotor
34			3147.099.CO	Intermediate wheel
35			3136.142.CO	Seconde wheel long (Aig.)
36			3122.056.CO	Third wheel

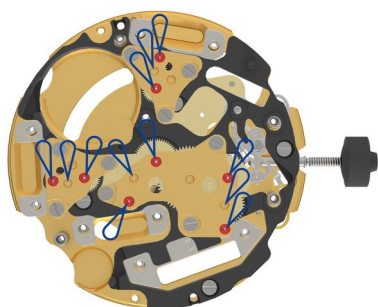










37			2020.148.G	Train wheel bridge
38			4000.250	Schraube
39			4000.250	Schraube
40			4000.250	Schraube
41			3715.095.RK	Rotor
42			3147.048.CO	Intermediate wheel (counter)
43			3402.006.CO	Minute counting wheel

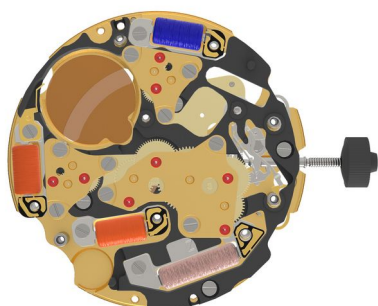











44			2020.149.G	Counter train wheel bridge
45			4000.250	Schraube
46			4000.250	Schraube
47			4000.250	Schraube






48			3715.095.RK	Rotor
49			3147.053.CO	Intermediate wheel (counter 1/10 sec)
50			3402.016.CO	Counting wheel 1/10 sec

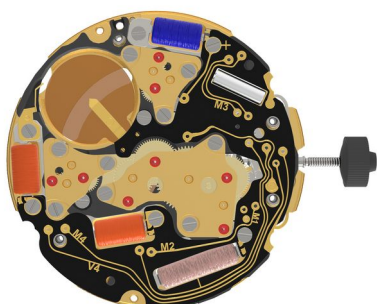













51			2020.149.G	Counter train wheel bridge
52			4000.250	Schraube
53			4000.250	Schraube
54			4000.250	Schraube
55			9014	Moebius 9014

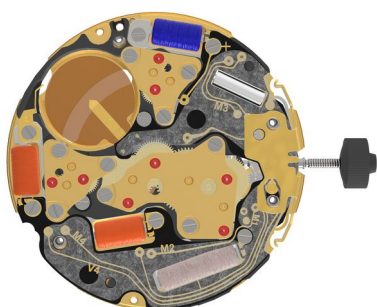




56			3621.053.RK	Coil
			Attention: Please hold the coil only on the grey coil core.	
57			3621.054.RK	Coil
			Attention: Please hold the coil only on the grey coil core.	
58			3621.055.RK	Coil
			Attention: Please hold the coil only on the grey coil core.	
59			3621.054.RK	Coil
			Attention: Please hold the coil only on the grey coil core.	
60			3601.118	Contact strip
61			4000.250	Schraube
62			4000.250	Schraube

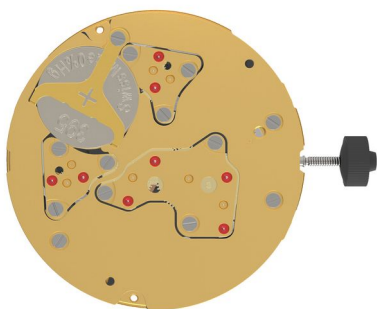
63			4000.250	Schraube
64			4000.250	Schraube
65			3603.034	Battery insulator










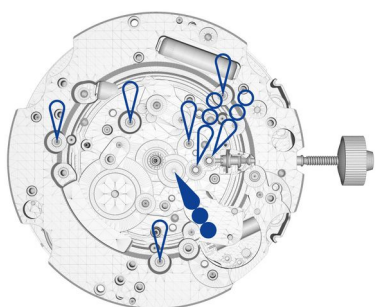
66			3612.247.5040	Electronic module
67			4000.250	Schraube
68			4000.250	Schraube
69			4000.250	Schraube
70			4000.250	Schraube
71			4000.250	Schraube




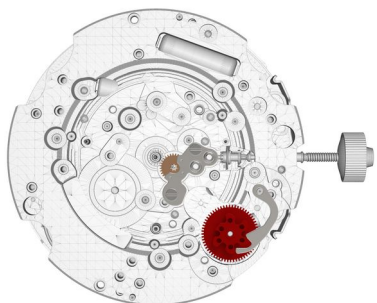
72			3603.069	Circuit insulator
73			3601.107.G	Pusher contact spring



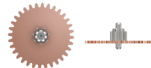




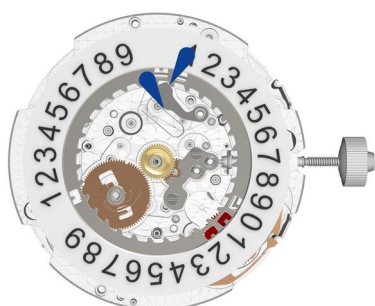
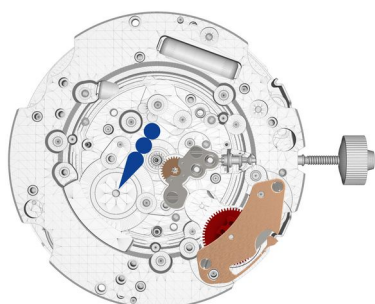
74		2130.137.G.M01.5040.B	Electronic module cover
75		4000.250	Schraube
76		4000.250	Schraube
77		4000.250	Schraube
78		3600.010.HGF	Battery 395 (Ø 9.50 x 2.70)
79		3601.109.G	Bridle +
80		4000.250	Schraube

















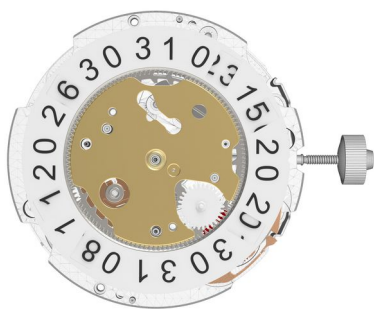
81		I-4 / 9020 / 9014	Moebius I-4 / Moebius 9020 / Moebius 9014
----	---	-------------------	---



82		3004.164.TA	Setting wheel
83		3004.164.TA	Setting wheel
84		3007.054.CO	Minute wheel
85		2130.143	Minute train bridge
86		4000.305	Screw




87		4000.305	Screw
88		3004.227	Tens indicator driving wheel The short tooth of the tens indicator driving wheel must point to the center of the movement.
89		3500.075	Tens jumper
90		2130.142	Tens jumper maintaining plate Tensioning the spring arm.
91		4010.306	Screw
92		4010.306	Screw
93		9020	Moebius 9020
94		3004.224.CO	Date indicator driving wheel
95		3301.241	Hour wheel (Aig.)
96		3315.016	Friction spring
97		3504.214.AF.1.A	Units indicator (T3, G12) Nick of the indicator at 3 o'clock.
98		3500.049	Date jumper
99		3905.070	Date jumper spring Insert the date jumper spring in the previous opening.
100		8200	Moebius 8200



101  2130.141 Date indicator maintaining plate


102  4000.250 Schraube


103  3504.216.AF.1.A Tens indicator (T3, G12)  
Nick of the indicator at 3 o'clock.


104  3147.054 Intermediate wheel

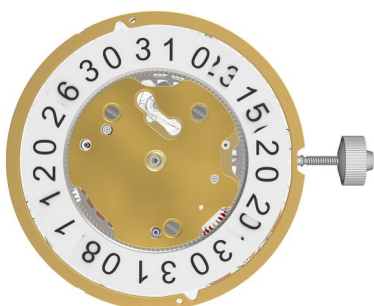



105  2130.140.G Date mechanism maintaining plate

106  4000.250 Schraube

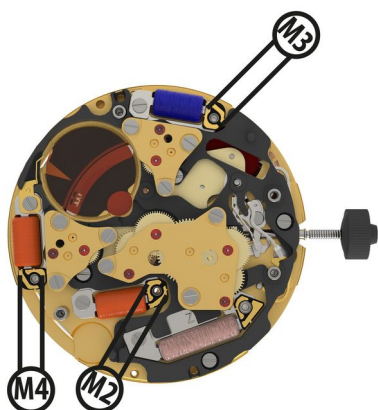
107  4000.250 Schraube

108  8200 Moebius 8200

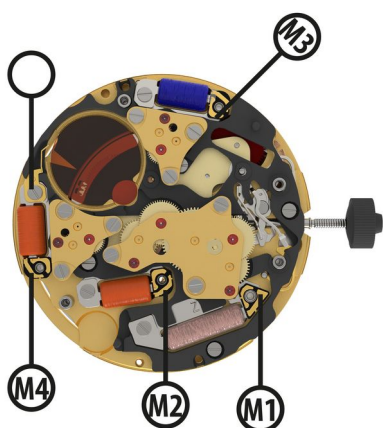


109  3506.072.G Dial support

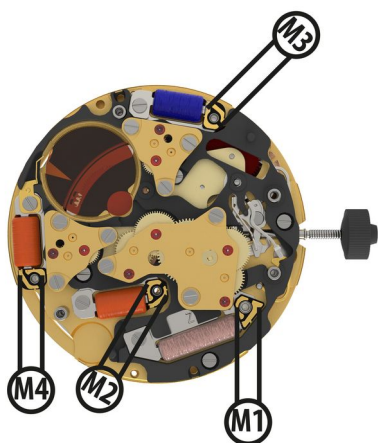
## Measurement



Signal generator (4.9ms, 8Hz)  
< 1.20 V



Coil insulation M1 - M4  
infinite



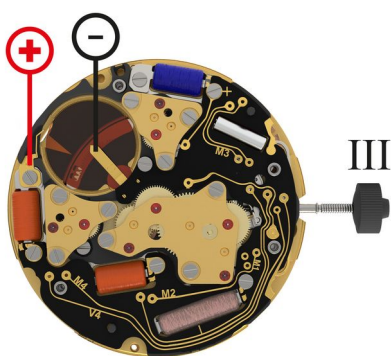
Coil resistance movement  
(min./max.) 1900 - 2100 Ohm

Coil resistance M2  
(min./max.) 1680 - 1880 Ohm

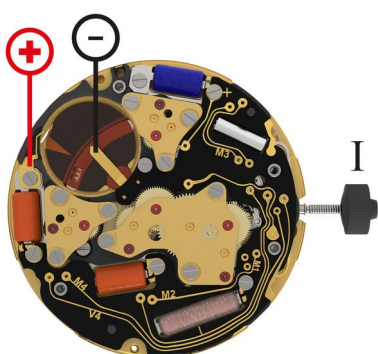
Coil resistance M3  
(min./max.) 1680 - 1880 Ohm

Spulenwiderstand M4  
(min./max.) 1680 - 1880 Ohm





Setting stem in position III, 60 s measuring interval.  
(typ./max.) 0.10 / 0.30  $\mu$ A



Setting stem in position I, calendar not in gear, 60s measuring interval.

(typ./max.) 1.32 / 1.65  $\mu$ A

Lower working voltage limit  
<1.20 V

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



Voltage  
typ 1.5 V