

Caliber 1004 – 10½"



Product Specifications

Analog quartz movement

Line	slimtech
Caliber	1004
Size	10½"
Version Swiss Made	10 Jewels / gold plated EOL
Standard battery life	25 months
High battery life	40 months
Standard hand fitting height	1

Features

- Repairable metal watch movement
- Power saving mechanism with pulled out stem:
Reduction of consumption approximately 70%
- Complete interchangeability between 1002-1009,
1012-1019

Functions

- Small second
- 2 hands

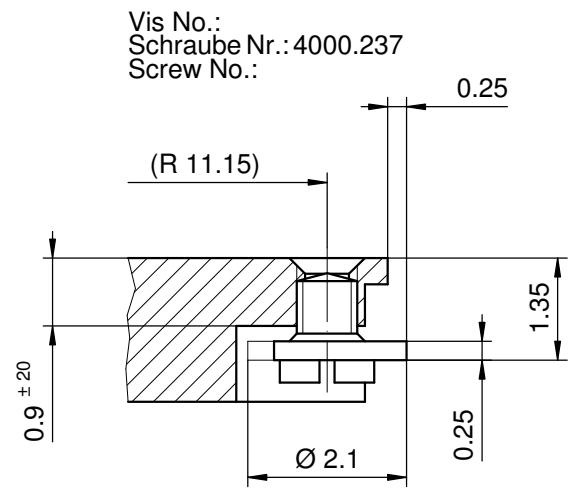
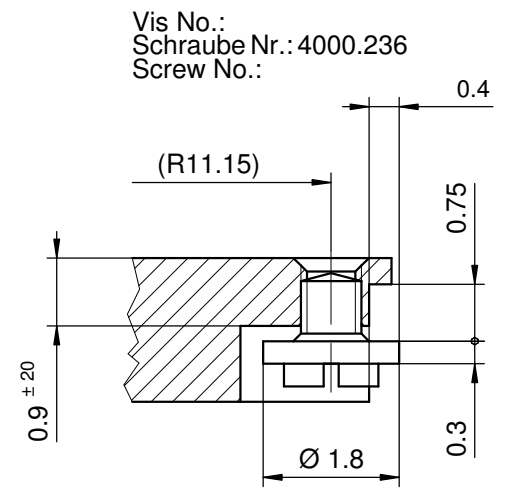
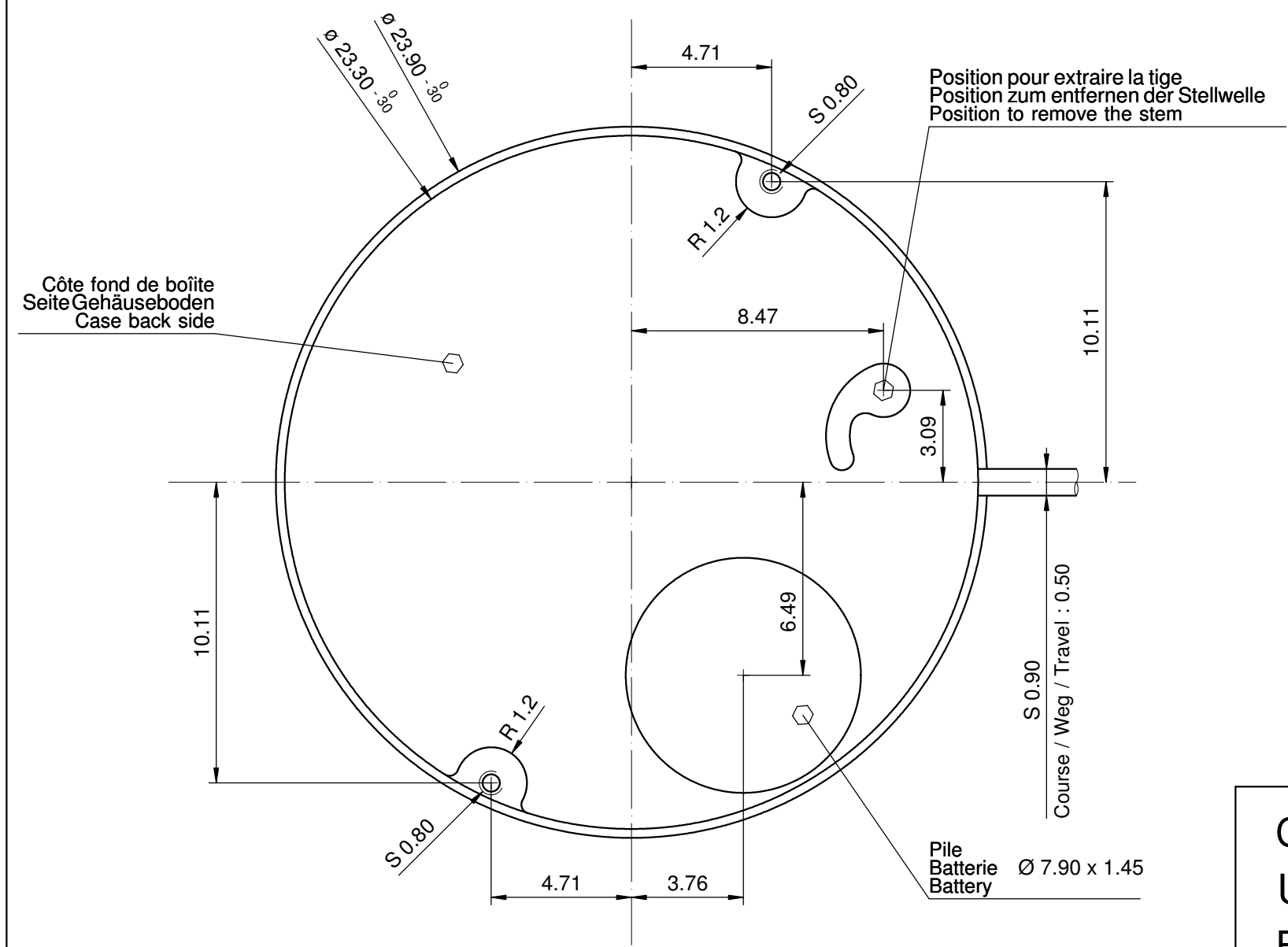
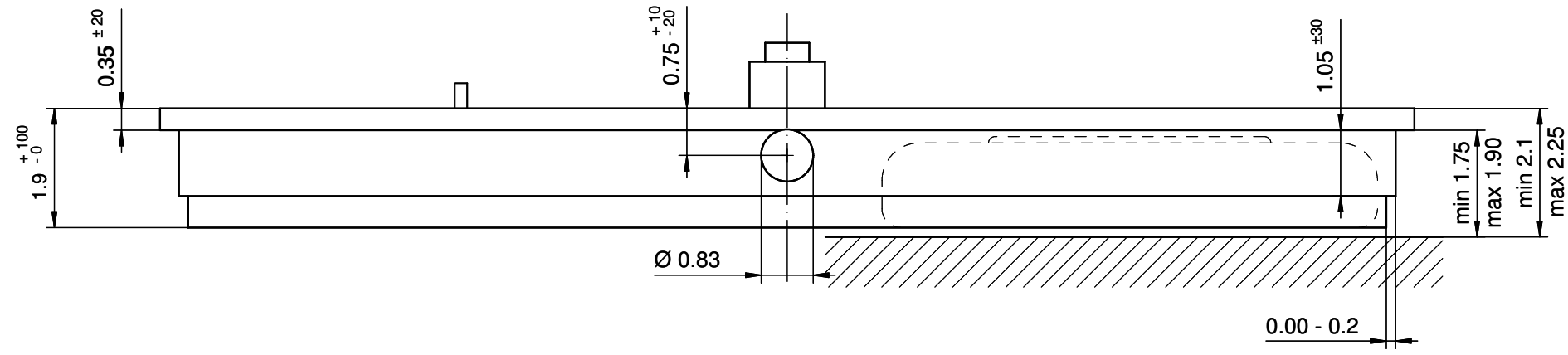
Caliber 1004 – 10½"

Technical Specifications

Diameter Total	23.90 mm
Case fitting	23.30 mm
Movement height	1.90 mm
Height over standard battery	1.90 mm
Height over high battery	2.15 mm
Movement rest	0.35 mm
Height over stem	0.75 mm
Length of stem travel	1.00 mm
Stem thread	0.90 mm
Useful torque second – typical	4 µNm
Useful torque minute – typical	200 µNm
Operating temperature	0 - 50 °C
Instantaneous rate	-10/ +20 sec/month
Resistance to magnetic fields	18.8 Oe
Resistance against shock	NIHS 91-10

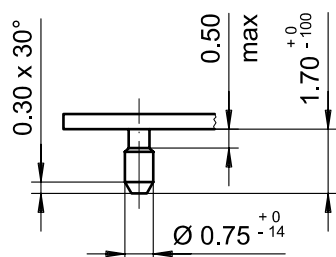
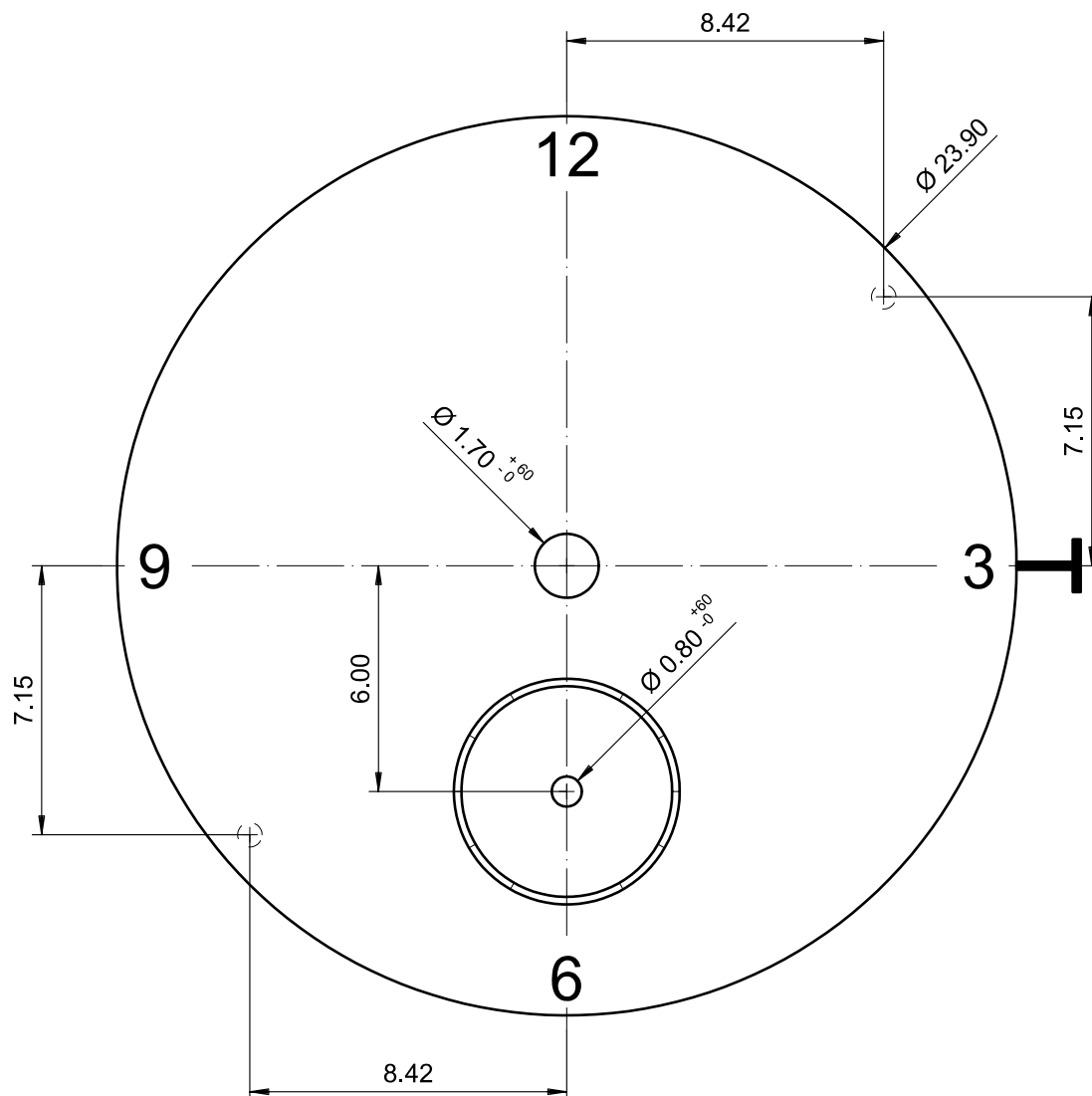
Battery Specifications

Standard battery	No. 341
High battery	No. 315
Standard battery life	25 months
High battery life	40 months
Battery voltage	1.5 V
Current consumption – typical	0.74 µA
Current consumption – maximum	1.1 µA



Sécurité entre aiguille minute et verre : min 0.30 mm
Sicherheit zwischen Minutenzeiger und Glas : min 0.30 mm
Security between minute hand and glass : min 0.30 mm

Cage Uhrwerkgestell 101½" Frame		Issued	20 Mai 2008	dh
		Modified	22 Mai 2013 ÄA 13271	dh
		Released	YES	
		Tolerance	+/- 20 µm	
		Scale	10 : 1 (5 : 1) (A3H)	
RONDA	1004	Sous réserve de modifications Änderungenvorbehalten Modificationsreserved		
		No.	5000.369	02



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

Tige
Stellw.
Stem
3H

Cadran
Zifferblatt
Dial

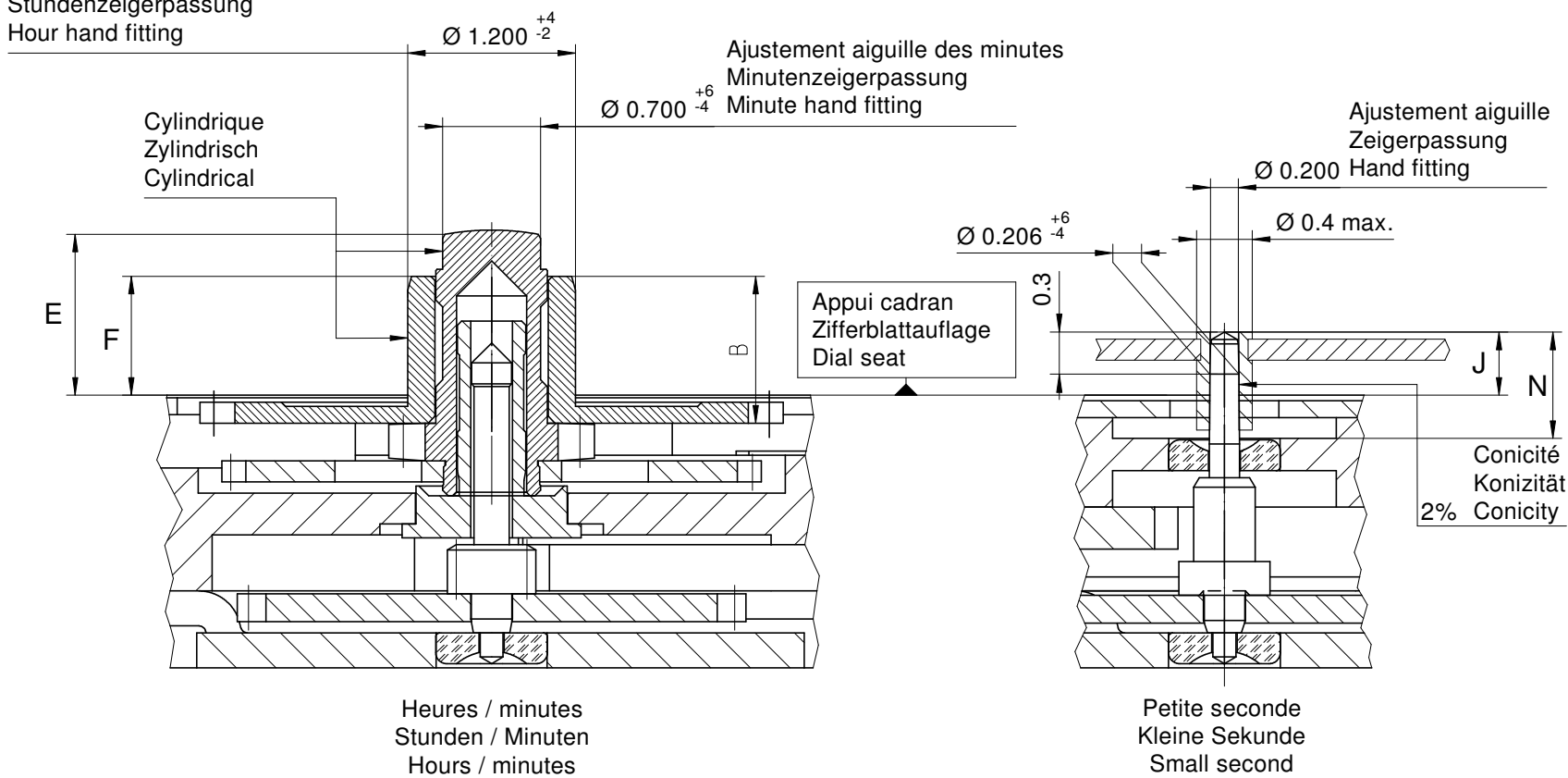
10 1/2"

Issued	13 Dez 2006	cw
Modified	15.Dez.2006 ÄA ----	cm
Released	YES	
Tolerance	+/- 20 µm	
Scale	5 : 1 (A4V)	
Sous réserve de modifications Äenderungen vorbehalten Modifications reserved		
No.	5010.521	01

RONDA

1004

Ajustement aiguille des heures
Stundenzeigerpassung
Hour hand fitting



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)					
	Chaussée Minutenrohr Cannon-pinion	Roue des heures Stundenrad Hour wheel	Petite seconde Kleine Sekunde Small second			Roue des heures Stundenrad Hour wheel	Cadran Zifferblatt Dial		Aiguilles Zeiger Hands	
							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	
1	1.15	0.85	0.45	0.75	1.05	0.70	0.40	0.20	0.15	
2	1.40	1.10	0.70	1.00	1.30	0.95	0.65	0.40	0.15	
3	1.73	1.30	0.80	1.10	1.50	1.30	0.90	0.50	0.15	

		Aig. des minutes Minutenzeiger Minute hand	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.	30	30	10	Masse / Masse / weight
µNm	max.	0.60	0.60	0.04	Balourd / Unwucht / unbalance
gmm ²	max.	-	-	0.2	Inertie / Massenträgheit / Inertia
N	max.	40	40	30	Force de chassage / Aufpresskraft / Force

Aiguillages Zeigerwerkhöhen 10¹/₂" Hand fitting heights

RONDA

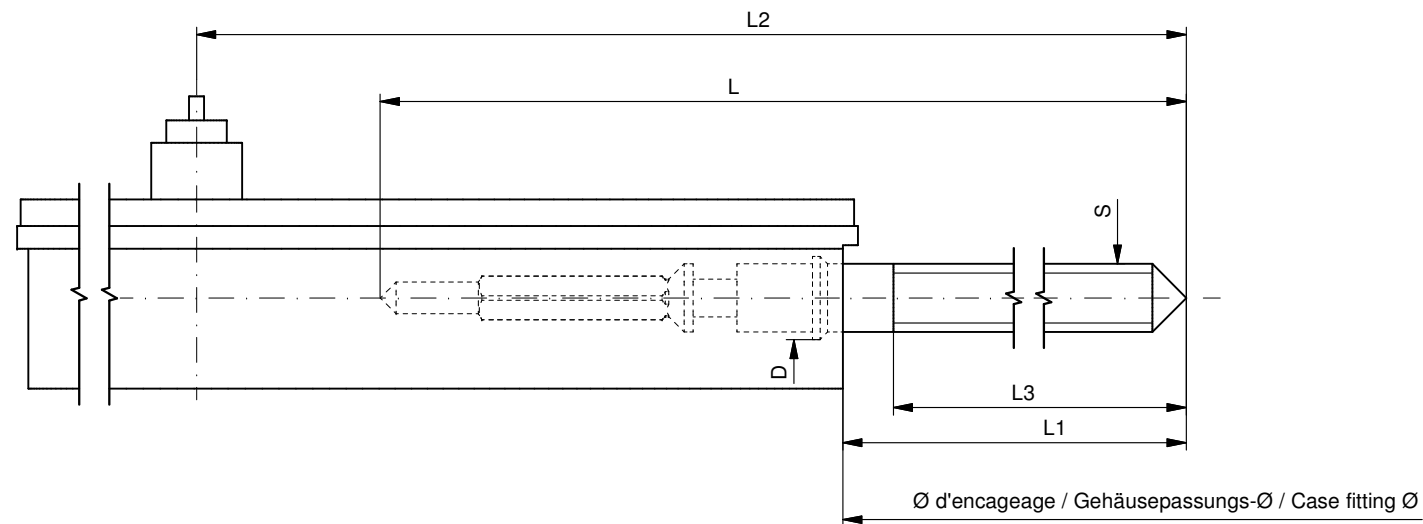
1004, 1009, 1014, 1019

Issued	14 Mrz 2001	mk
Modified	15 Okt 2014 ÄA 13275	dh
Released	Yes	
Tolerance	µm	
Scale	20 : 1 (A3H)	
Sous réserve de modifications Äenderungen vorbehalten Modifications reserved		
No.	3316.070	09

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

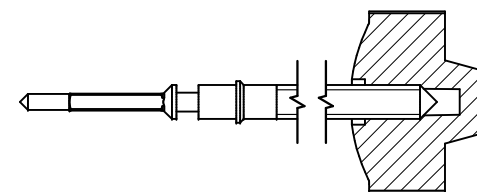
* Bei abweichenden Werten, bitte technischen Kundendienst anfragen

* 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)

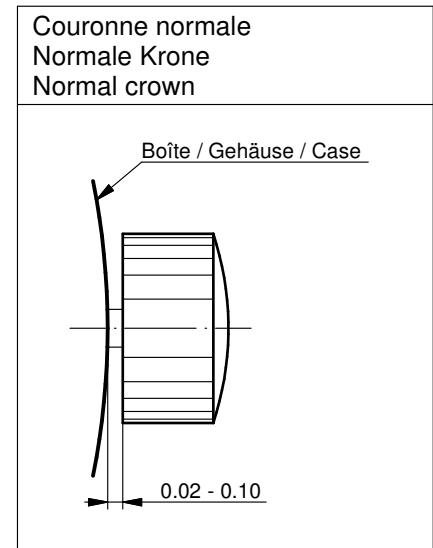
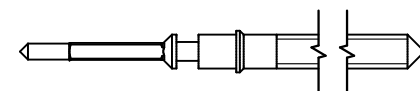
No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.215.CO	20.00	11.28	22.93	11.75	0.90	0.90



Couleur de la couronne Kronenfarbe Crown color	orange clair hellorange light orange
Code	UN 2338

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

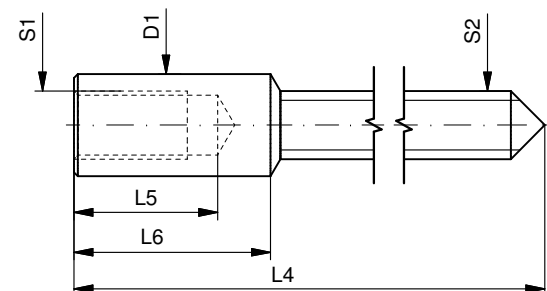
No. d'article Artikelnummer Part number	L	L1	L2	L3	S	D
3000.215	20.00	11.28	22.93	11.75	0.90	0.90



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

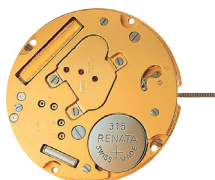
No. d'article Artikelnummer Part number	L4	L5 (min)	L6	S1	S2	D1
3000.040	12.00	1.90	2.60	0.90	0.90	1.35



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

RONDA 1002, 1003, 1004

Issued	10 Feb 2015	mk5225
Modified	17 Mär 2017 ÄA 34582	mg5224
Released	YES	
Tolerance	---	
Scale	10:1 (A3)	
Sous réserve de modifications Änderungen vorbehalten Modifications reserved		
No.	5030.046	01



10 1/2'''



1002



1003



1004

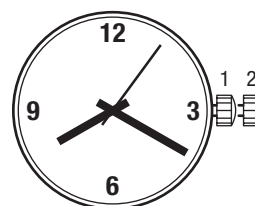


Funktionen

Fonctions

Functions

Kaliber	Stellwellenpos.	Funktionen
Calibre	Pos. de tige	Fonctions
Caliber	Stem position	Functions
1002	1	Normale Position / Position normale / Running position
	2	Zeiger stellen, mit Unterbruch der Motorimpulse Mise à l'heure, avec interruption des impulsions moteur Hand setting, with interruption of the motor pulses
1003, 1004	1	Normale Position / Position normale / Running position
	2	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 the motor pulses



Batterie

Pile

Battery

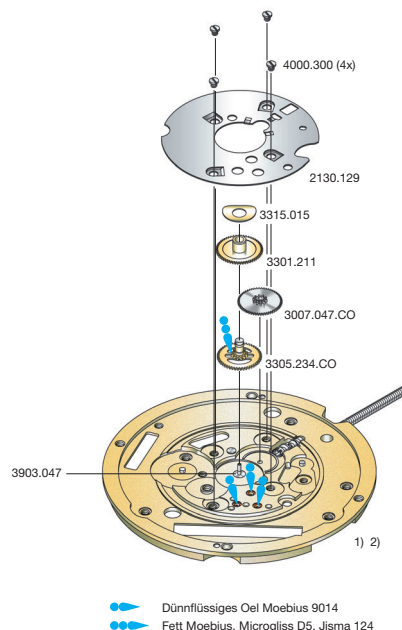
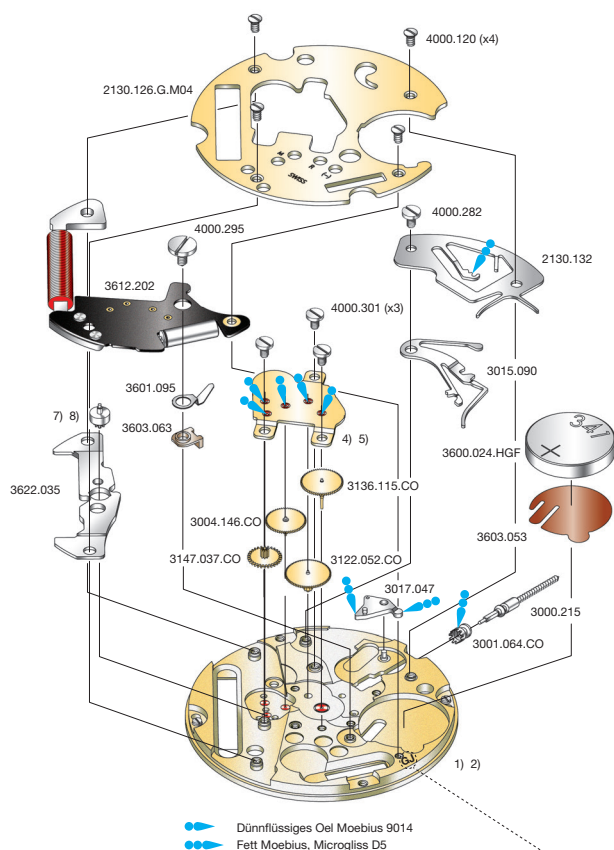
Kaliber	Batterie	Spannung	Artikelnummer RONDA
Calibre	Pile	Voltage	Numero d'article RONDA
Caliber	Battery	Tension	Part number RONDA
1002-1004	341/SR714SW	1.55 V	3600.024.HGF

Werkaufbau

Assemblage

Assembling

10 1/2''' 1002, 1003



Cal. 1003	Werkseite / Côté mouvement / Movement side		
Plan no.	Bestandteile	Fournitures	Spare Parts
1)	Werkplatte	Platine	Main plate
4)	Räderwerkbrücke	Pont rouage	Train w. bridge
2130.126.G.M04	Modul-Abdeckp.	Couvre module	Module cover pl.
2130.132	Deckplatte	Couvre mec.	Setting lever cov.
3000.215	Stellwelle	Tige	Stem
3001.064.CO	Kupplungstrieb	Pignon coulant	Sliding pinion
3004.146.CO	Sekundenzw.rad	Renvoi seconde	Second driv. wh.
3015.090	Wippe	Bascule	Yoke
3017.047	Winkelhebel	Tirette	Setting lever
3122.052.CO	Kleinbodenrad	Roue moyenne	Third wheel
3136.115.CO	Sekundenrad	Roue secondes	Second-wheel
3147.037.CO	Zwischenrad	Roue interméd.	Intermed. wheel
3600.024.HGF	Batterie	Pile	Battery
3601.095	Batterie-Kontakt	Bride contact	Battery contact
3603.053	Batterie-Isolation	Isolateur pile	Battery insulation
3603.063	Kontakt Isolation	Isolateur bride	Batt. contact ins.
3612.202	Modul m. Spule	Module av. bobine	Module w. coil
3622.035	Stator	Stator	Stator
7)	Rotor	Rotor	Rotor
4000.120	Schraube	Vis	Screw
4000.282	Schraube	Vis	Screw
4000.295	Schraube	Vis	Screw
4000.301	Schraube	Vis	Screw

Code: Beispiel GJ / exemple GJ / exemple GJ

	2. Buchstabe: K-V Second letter: K-V 2 ^{ème} chiffre: K-V	2. Buchstabe: ab W Second letter: from W 2 ^{ème} chiffre: à partir de W	Cal. Cal. Cal.
1)	2000.685.G	2000.689.G	1003
2)	2000.682.G	2000.689.G	1002
4)	2020.183.G.M01	2020.183.G.M01	1003
5)	2020.182.G.M01	2020.182.G.M01	1002
7)	3715.115.RK	3715.115.RK	1003
8)	3715.114.RK	3715.114.RK	1002

Cal. 1003	Zifferblattseite / Côté cadran / Dial side		
Plan no.	Bestandteile	Fournitures	Spare Parts
1)	Werkplatte	Platine	Main plate
2130.129	Zeigerw.haltepl.	Plaque maintien	Maintaining plate
3007.047.CO	Wechselrad	Minuterie	Minute wheel
3301.211	Stundenrad	Canon	Hour wheel
3305.234.CO	Minutenrohr	Chaussée	Cannon pinion
3315.015	Spreizfeder	Clinquant	Washer
3903.047	Zentrallagerrohr	Tube chaussée	Center tube
4000.300	Schraube	Vis	Screw

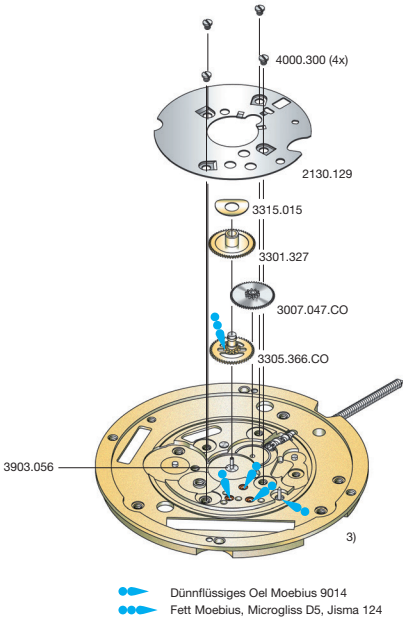
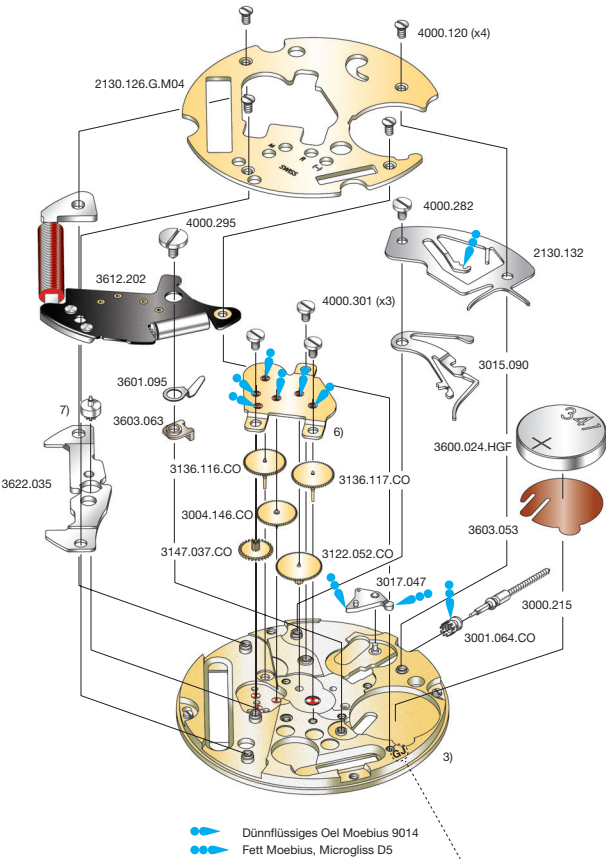
Abweichungen / Divergences / Deviations

Cal. 1002	Werkseite / Côté mouvement / Movement side		
Plan No.	Bestandteile	Fournitures	Spare Parts
2)	Werkplatte	Platine	Main plate
5)	Räderwerkbrücke	Pont rouage	Train w. bridge
2130.126.G.M01	Modul-Abdeckp.	Couvre module	Module cover pl.
3015.089	Wippe	Bascule	Yoke
3147.036.CO	Zwischenrad	Roue interméd.	Intermed. wheel
3612.205	Modul m. Spule	Module av. bobine	Module w. coil
8)	Rotor	Rotor	Rotor

Abweichungen / Divergences / Deviations

Cal. 1002	Zifferblattseite / Côté cadran / Dial side		
Plan No.	Bestandteile	Fournitures	Spare Parts
2)	Werkplatte	Platine	Main plate
3301.327	Stundenrad	Canon	Hour wheel
3305.366.CO	Minutenrohr	Chaussée	Cannon pinion
3903.058	Zentrallagerrohr	Tube chaussée	Center tube

10 1/2''' 1004

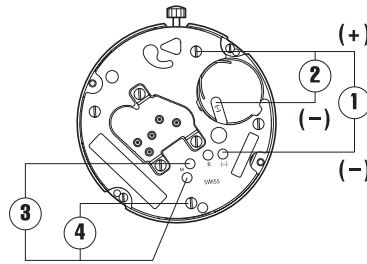


Code: Beispiel GJ / exemple GJ / exemple GJ

Cal. 1004	Werkseite / Côté mouvement / Movement side		
Plan no.	Bestandteile	Fournitures	Spare Parts
3)	Werkplatte	Platine	Main plate
6)	Räderwerkbrücke	Pont rouage	Train w. bridge
2130.126.G.M04	Modul-Abdeckp.	Couvre module	Module cover pl.
2130.132	Deckplatte	Couvre mec.	Setting lever cov.
3000.215	Stellwelle	Tige	Stem
3001.064.CO	Kupplungstrieb	Pignon coulant	Sliding pinion
3004.146.CO	Sekundenzw.rad	Renvoi seconde	Second driv. wh.
3015.090	Wippe	Bascule	Yoke
3017.047	Winkelhebel	Tirette	Setting lever
3122.052.CO	Kleinbodenrad	Roue moyenne	Third wheel
3136.116.CO	Kl. Sek. Radwelle	Roue axe pet. sec.	Sm. sec. w. pivot
3136.117.CO	Sek.-rad kurz	Roue sec. courte	Sec. wheel short
3147.037.CO	Zwischenrad	Roue interméd.	Intermed. wheel
3600.024.HGF	Batterie	Pile	Battery
3601.095	Batterie-Kontakt	Bride contact	Battery contact
3603.053	Batterie-Isolation	Isolateur pile	Battery insulation
3603.063	Kontakt Isolation	Isolateur bride	Batt. contact ins.
3612.202	Modul m. Spule	Module av. bobine	Module w. coil
3622.035	Stator	Stator	Stator
7)	Rotor	Rotor	Rotor
4000.120	Schraube	Vis	Screw
4000.282	Schraube	Vis	Screw
4000.295	Schraube	Vis	Screw
4000.301	Schraube	Vis	Screw

	2. Buchstabe: A-J Second letter: A-J 2 ^{ème} chiffre: A-J	2. Buchstabe: ab K Second letter: from K 2 ^{ème} chiffre: à partir de K	Cal. Cal. Cal.
3)	2000.609.RK	2000.689.G	1004
6)	2020.142.G.M01	2020.184.G.M01	1004
7)	3715.070.RK	3715.115.RK	1004

Cal. 1004	Zifferblattseite / Côté cadran / Dial side		
Plan no.	Bestandteile	Fournitures	Spare Parts
3)	Werkplatte	Platine	Main plate
2130.129	Zeigerw.haltepl.	Plaque maintien	Maintaining plate
3007.047.CO	Wechselrad	Minuterie	Minute wheel
3301.327	Stundenrad	Canon	Hour wheel
3305.366.CO	Minutenrohr	Chaussée	Cannon pinion
3315.015	Spreizfeder	Clinquant	Washer
3903.056	Zentrallagerrohr	Tube chaussée	Center tube
4000.300	Schraube	Vis	Screw



Kaliber Calibre Caliber	Pos. Pos. Pos.	Einheit Unité Unit	Messwerte Valeurs mesurées Measured values	Kontrolle Contrôle Check	Bemerkungen Remarques Remarks
1002–1004	1	V	1,55	Batterie-Spannung Tension de la pile Battery voltage	Mit Batterie Avec pile With battery
1002	2	µA	0,40–0,60 ~ 2,40 *	Stromaufnahme (*bei Puls, Periode = 5 Sek.) Consommation de courant (*pend. impuls., p. = 5 sec.)	Ohne Batterie, mit externer Speisung Sans pile, avec alimentation externe
1003, 1004	2	µA	0,50–0,95	Current consumption (*by pulse, period = 5 sec.)	Without battery, with external supply
1002–1004	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
1002 1003, 1004	3	KΩ	2,10–2,30 2,50–2,70	Spulenwiderstand Résistance de la bobine Resistance of the coil	Ohne Batterie Sans pile Without battery
1002–1004	4	KΩ	∞	Spulenisolation Isolation de la bobine Coil insulation	Ohne Batterie Sans pile Without battery
1002–1004		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

Nr. H 100x.1A



Emboîtage / outils

Nr. H 100x.1T



Casing / tools

	SWISS MADE
2 Schrauben 2 Vis 2 Screws	

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.

Stellwelle entfernen

Beim Entfernen der Stellwelle muss sich die Stellwelle in Position 1 (gedrückt) befinden, bevor auf den Winkelhebel gedrückt wird.

Enlever la tige

En enlevant la tige, la tige doit se trouver en position 1 (poussée), avant de pousser sur la tirette.

Stem removal

For removal of the stem, the stem must be pushed into position 1 (pressed in) prior to apply pressure to the setting lever.