

10 1/2'''



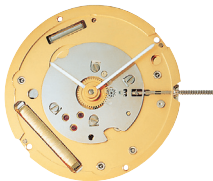
1002



1003



1004



## 1. Werkdimensionen

## 1. Dimensions des mouvements

## 1. Movement dimensions

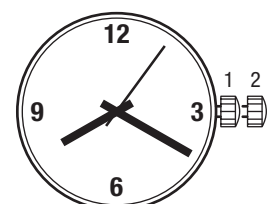
| Kaliber<br>Calibre<br>Caliber                                   | Ø Total | Ø Werksitz<br>Ø Encageage<br>Ø Case fitting | Werkhöhe<br>Hauteur mouvement<br>Movement height | Höhe Batterie<br>Hauteur pile<br>Height of battery | Höhe Stellwelle<br>Hauteur tige<br>Height of stem | Höhe Werkaufgabe<br>Hauteur filet<br>Movement rest |
|---|---------|---|--|--|---|--|
| Einh./ Unité/ Unit  | mm      | mm  | mm   | mm   | mm  | mm   |
| 1002-1004   | 23,90   | 23,30                                       | 1,90   | 1,90   | 0,75  | 0,35   |
| Stellwellengewinde/ Filetage de la tige/ Stem thread: Ø 0,90 mm |         |   |  |  | Weg/ Chemin/ Length of travel: 1,00 mm            |  |

## 2. Funktionen

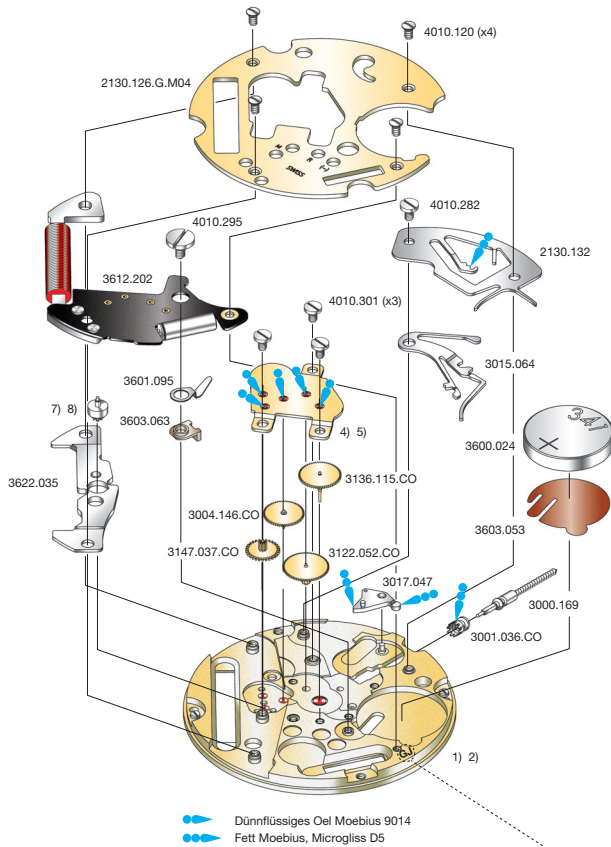
## 2. Fonctions

## 2. Functions

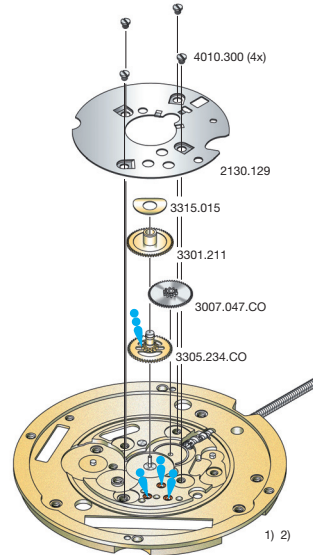
| Kaliber<br>Calibre<br>Caliber | Stellwellenpos.<br>Pos. de tige<br>Stem position | Funktionen<br>Fonctions<br>Functions  |
|-------------------------------|--|---|
| 1002                          | 1  | Normale Position / Position normale / Running position<br>Zeiger stellen, mit Unterbruch der Motorimpulse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



10<sup>1/2</sup>''' 1002, 1003



Düninflüssiges Öl Moebius 9014  
 Fett Moebius, Microgliss D5



Düninflüssiges Öl Moebius 9014  
 Fett Moebius, Microgliss D5, Jisma 124

Code: Beispiel GJ / exemple GJ / exemple GJ

| Cal. 1003 Werkseite / Côté mouvement / Movement side |                    |                   |                    |
|--|--------------------|-------------------|--------------------|
| Plan no.   | Bestandteile       | Fournitures       | Spare Parts        |
| 1)   | Werkplatte         | Platine           | Main plate         |
| 4)   | Räderwerkbrücke    | Pont rouge        | Train w. bridge    |
| 2130.126.G.M04                                       | Modul-Abdeckp.     | Couvre module     | Module cover pl.   |
| 2130.132   | Deckplatte         | Couvre mec.       | Setting lever cov. |
| 3000.169   | Stellwelle         | Tige              | Stem               |
| 3001.036.CO  | Kupplungstrieb     | Pignon coulant    | Sliding pinion     |
| 3004.146.CO  | Sekundenzw.rad     | Renvoi seconde    | Second driv. wh.   |
| 3015.064   | 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   | 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              |
| 4010.120   | Schraube           | Vis               | Screw              |
| 4010.282   | Schraube           | Vis               | Screw              |
| 4010.295   | Schraube           | Vis               | Screw              |
| 4010.301   | Schraube           | Vis               | Screw              |

|    | 2. Buchstabe: A-J<br>Second letter: A-J<br>2 <sup>ième</sup> chiffre: A-J | 2. Buchstabe: ab K<br>Second letter: from K<br>2 <sup>ième</sup> chiffre: à partir de K | Cal.<br>Cal.<br>Cal. |
|----|---|---|----------------------|
| 1) | 2000.605.G  | 2000.685.G  | 1003                 |
| 2) | 2000.602.G  | 2000.682.G  | 1002                 |
| 4) | 2020.141.G.M01  | 2020.183.G.M01  | 1003                 |
| 5) | 2020.140.G.M01  | 2020.182.G.M01  | 1002                 |
| 7) | 3715.070.RK   | 3715.115.RK   | 1003                 |
| 8) | 3715.071.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            |
| 4010.300   | 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 rouge        | Train w. bridge  |
| 2130.126.G.M01                                       | Modul-Abdeckp.  | Couvre module     | Module cover pl. |
| 3147.036.CO  | Zwischenrad     | Roue interméd.    | Intermed. wheel  |
| 3612.205   | Modul m. Spule  | Module av. bobine | Module w. coil   |
| 8)   | Rotor           | Rotor             | Rotor            |

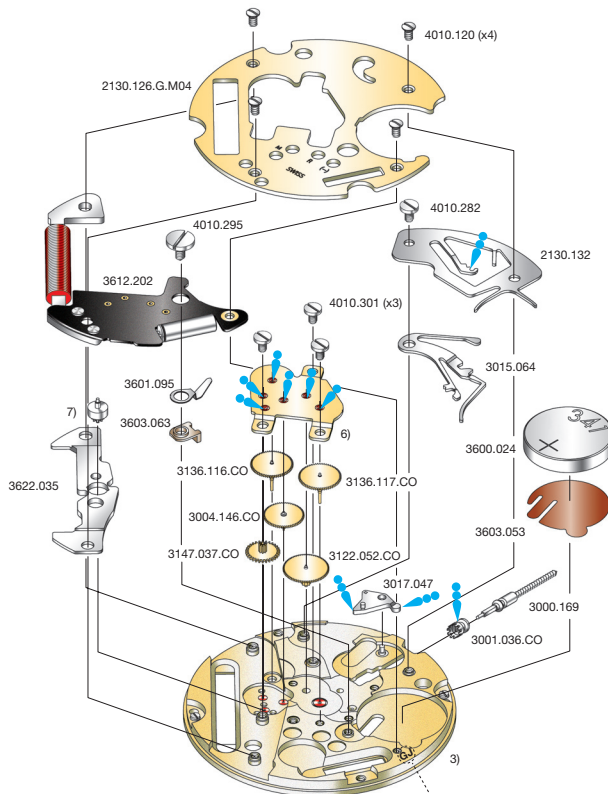
Abweichungen / Divergences / Deviations

| Cal. 1002 Zifferblattseite / Côté cadran / Dial side |              |             |               |
|--|--------------|-------------|---------------|
| Plan No.   | Bestandteile | Fournitures | Spare Parts   |
| 2)   | Werkplatte   | Platine     | Main plate    |
| 3305.257.CO  | Minutenrohr  | Chaussée    | Cannon pinion |

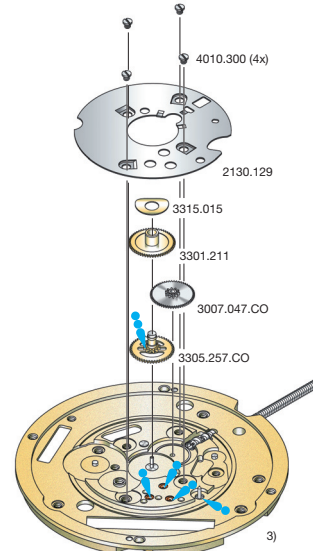
Batterien / Piles / Batteries

|           |                        |                          |
|-----------|------------------------|--------------------------|
| 1002-1004 | Nr. 341<br>Dim. Ø x H: | SR 920 SW<br>7.90 x 1,45 |
|-----------|------------------------|--------------------------|

10 1/2''' 1004



••••• Dünnflüssiges Öl Moebius 9014  
 ••••• Fett Moebius, Microgliss D5



••••• Dünnflüssiges Öl Moebius 9014  
 ••••• Fett Moebius, Microgliss D5, Jisma 124

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 rouge         | Train w. bridge    |
| 2130.126.G.M04 | Modul-Abdeckp.                             | Couvre module      | Module cover pl.   |
| 2130.132       | Deckplatte                                 | Couvre mec.        | Setting lever cov. |
| 3000.169       | Stellwelle                                 | Tige               | Stem               |
| 3001.036.CO    | Kupplungstrieb                             | Pignon coulant     | Sliding pinion     |
| 3004.146.CO    | Sekundenzw.rad                             | Renvoi seconde     | Second driv. wh.   |
| 3015.064       | 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       | 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              |
| 4010.120       | Schraube                                   | Vis                | Screw              |
| 4010.282       | Schraube                                   | Vis                | Screw              |
| 4010.295       | Schraube                                   | Vis                | Screw              |
| 4010.301       | Schraube                                   | Vis                | Screw              |

|    | 2. Buchstabe: A-J<br>Second letter: A-J<br>2 <sup>ème</sup> chiffre: A-J | 2. Buchstabe: ab K<br>Second letter: from K<br>2 <sup>ème</sup> chiffre: à partir de K | Cal.<br>Cal.<br>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      |
| 3301.211    | Stundenrad                                 | Canon           | Hour wheel        |
| 3305.257.CO | Minutenrohr                                | Chaussée        | Cannon pinion     |
| 3315.015    | Spreizfeder                                | Clinquant       | Washer            |
| 4010.300    | Schraube                                   | Vis             | Screw             |

### 3. Leistungen

### 3. Performances

### 3. Performances

| Kaliber<br>Calibre<br>Caliber   | Bedingungen<br>Conditions<br>Conditions             | Momentaner Gang<br>Marche instantanée<br>Instantaneous rate | Drehmoment<br>Couple utile<br>Torque | Gangreserve<br>Autonomie<br>Autonomy |
|---|---|---|--------------------------------------|--------------------------------------|
|   | Einheit / Unité / Unit<br>Typ.Wert / Valeur / value | Mi (s/month)  | T (µNm)<br>sec. min.                 | A (Monat/mois/month)                 |
| 1002  | 1,55 V 23°C   | - 10/+ 20   | 32                                   | 40                                   |
| 1003-1005   | 1,55 V 23°C<br>Batt./ Pile 13,5 mAh                 | - 10/+ 20   | 4 200                                | 24                                   |
| Magnetfeldabschirmung / Résist. aux champs magn. / Resist. to magnetic fields |   |   | 18,8 Oe 1500 A/M                     | Norm <b>CE</b>                       |
| Betriebstemperatur / Température d'opération / Operating temperature          |   |   | 0-50°C                               |                                      |
| Schockresistenz / Résistance au choc/ Shock resistance                        |   |   | NIHS 91-10                           |                                      |

#### Anzeige Ende der Batterielaufzeit EOL

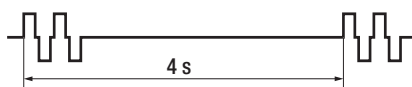
Der Sekundenzeiger hält während 4 Sekunden an und holt dann die 4 Sprünge kurzfristig nach.

#### Indication de fin de vie de pile

L'aiguille de seconde s'arrête durant 4 secondes puis fait rapidement 4 pas.

#### Battery end-of-life indication EOL

The second hand stops for 4 seconds before executing rapidly the 4 steps.



Folgende Kaliber sind mit dem EOL-System ausgerüstet:

Les calibres suivants sont munis du système EOL:

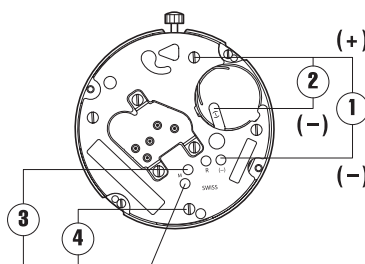
The following calibers are equipped with EOL:

Swiss Made 10<sup>1/2</sup>''' - 1003, 1004

### 4. Elektr. Messungen

### 4. Contrôles électriques

### 4. Electrical checking



| Kaliber<br>Calibre<br>Caliber | Pos.<br>Pos.<br>Pos. | Einheit<br>Unité<br>Unit              | Messwerte<br>Valeurs mesurées<br>Measured values | Kontrolle<br>Contrôle<br>Check  | Bemerkungen<br>Remarques<br>Remarks   |
|-------------------------------|----------------------|---------------------------------------|--|---|---|
| 1002-1004                     | 1                    | V                                     | 1,55   | Batterie-Spannung<br>Tension de la pile<br>Battery voltage  | Mit Batterie<br>Avec pile<br>With battery   |
| 1002                          | 2                    | µA                                    | 0,40-0,60<br>~ 2,40 *                            | Stromaufnahme (*bei Puls, Periode = 5 Sek.)<br>Consommation de courant (*pend. impuls., p. = 5 sec.)                          | Ohne Batterie, mit externer Speisung<br>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<br>Contrôle de fonctionnement à tension minimale<br>Check with lowest possible voltage | Ohne Batterie, mit externer Speisung<br>Sans pile, avec alimentation externe<br>Without battery, with external power supply |
| 1002                          | 3                    | KΩ                                    | 2,10-2,30  | Spulenwiderstand  | Ohne Batterie   |
| 1003, 1004                    |                      | KΩ                                    | 2,50-2,70  | Résistance de la bobine<br>Resistance of the coil   | Sans pile<br>Without battery  |
| 1002-1004                     | 4                    | KΩ                                    | ∞  | Spulenisolation<br>Isolation de la bobine<br>Coil insulation  | Ohne Batterie<br>Sans pile<br>Without battery   |
| 1002-1004                     |                      | Sek./Monat<br>sec./mois<br>sec./month | - 10/+ 20  | Induktivsonde 60 Sek.<br>Senseur inductif 60 sec.<br>Inductive sensor 60 sec.   | Mit Batterie<br>Avec pile<br>With battery   |

## 5. Zeigerwerk

## 5. Aiguillage

## 5. Dial-train

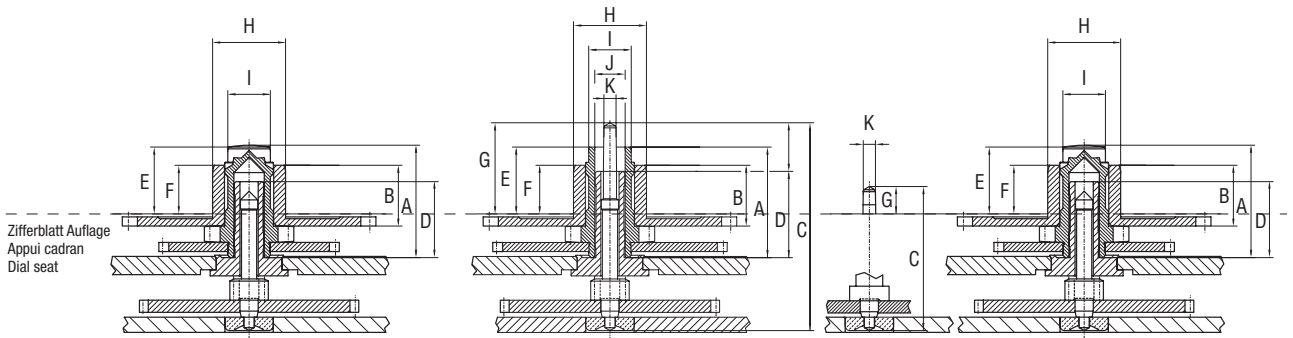
| Kaliber<br>Calibre<br>Caliber | Zeigerwerk<br>Aiguillage<br>Height of<br>dial train | Einzelteil-Höhe<br>Hauteur de la pièce ind.<br>Height of individ. piece |      |      |      | Höhe ab Zifferblattauflage<br>Dépassement platine<br>Height from base |      |      | Ø Zeigeranpassung<br>Ø Ajust. des aiguilles<br>Ø Adjustm. of hands |      |      | Zifferblattstärke<br>Epaisseur<br>du cadran |
|-------------------------------|---|---|------|------|------|---|------|------|--|------|------|---|
|                               |   | mm  | mm   | mm   | mm   | mm  | mm   | mm   | mm   | mm   | mm   | mm  |
|                               | No.   | A   | B    | C    | D    | E   | F    | G    | H  | I    | K    | Dial thickness                              |
| 1002                          | 0   | 1,65  | 0,80 | –    | 1,15 | 0,93  | 0,60 | –    | 1,20   | 0,70 | –    | 0,30  |
|                               | 1   | 1,85  | 1,00 | –    | 1,25 | 1,13  | 0,80 | –    | 1,20   | 0,70 | –    | 0,40  |
| 1003                          | 0   | 1,62  | 0,80 | 3,12 | 1,15 | 0,96  | 0,60 | 1,25 | 1,20   | 0,70 | 0,20 | 0,30  |
|                               | 1   | 1,82  | 1,00 | 3,42 | 1,42 | 1,10  | 0,80 | 1,55 | 1,20   | 0,70 | 0,20 | 0,40  |
| 1004                          | 1   | 1,85  | 1,00 | 2,37 | 1,25 | 1,13  | 0,80 | 0,45 | 1,20   | 0,70 | 0,20 | 0,40  |

10 1/2'''

1002

1003

1004



Für Einzelheiten verlangen Sie bitte die entsprechenden Zeigerwerkpläne!  
Pour plus de détails demandez nos plans d'aiguillage!  
For more detailed information please ask for the corresponding hand drawings!

## 6. Einschalen/Werkzeuge

## 6. Emboîtement/outils

## 6. Casing/tools

Nr. H 100x.1A



Nr. H 100x.1T



| SWISS MADE                       |  |
|----------------------------------|--|
| 2 Schrauben<br>2 Vis<br>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 heures 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.

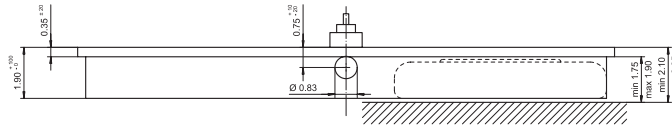
### Enlever la tige

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.

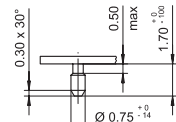
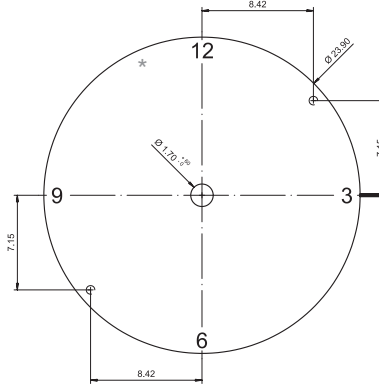
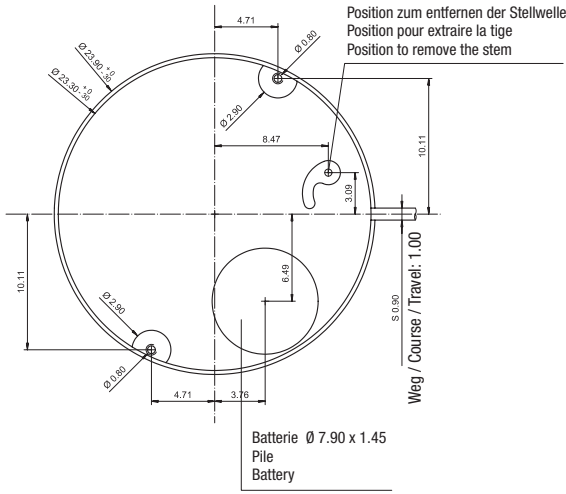
10 1/2''' 1002, 1003



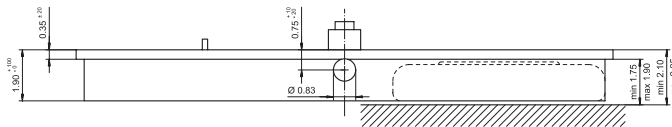
Seite Gehäuseboden  
Côté fond de boîte  
Case back side

Zifferblattseite  
Côte cadran  
Dial side

Zifferblattfüsse  
Pieds de cadran  
Dial feet



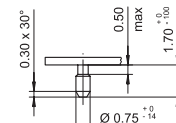
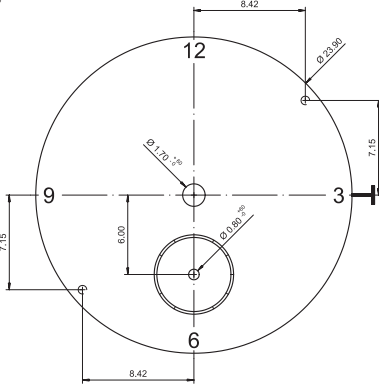
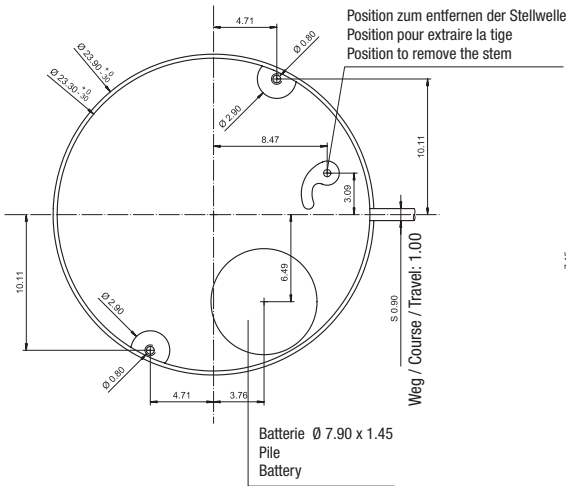
10 1/2''' 1004



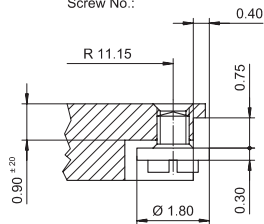
Seite Gehäuseboden  
Côté fond de boîte  
Case back side

Zifferblattseite  
Côte cadran  
Dial side

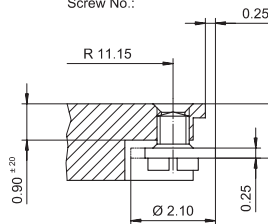
Zifferblattfüsse  
Pieds de cadran  
Dial feet



Vis No.:  
Schraube Nr.: 4000.236  
Screw No.:



Vis No.:  
Schraube Nr.: 4000.237  
Screw No.:



Sicherheit zwischen Minutenzeiger und Glas min. 0,30 mm  
Sécurité entre l'aiguille des minutes et le verre min. 0,30 mm  
Security between minute hand and glass min. 0,30 mm

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