

Technische Anleitung Instructions techniques No. 300.5 Technical Instructions



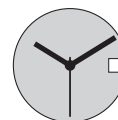
10 1/2^{mm}



702



703



705



708



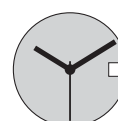
11 1/2^{mm}



712



713



715

1. Werkdimensionen

1. Dimensions des mouvements

1. Movement dimensions

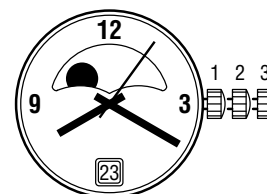
| Kaliber | Ø Total | Ø Werksitz | Werkhöhe | Höhe Batterie | Höhe Stellwelle | Höhe Werkauflage |
|--|---------|----------------|-------------------|---|-----------------|------------------|
| Calibre | Ø Total | Ø Encageage | Hauteur mouvement | Hauteur pile | Hauteur tige | Hauteur filet |
| Caliber | Ø Total | Ø Case fitting | Movement height | Height of battery | Height of stem | Movement rest |
| Einh./ Unité/ Unit | mm | mm | mm | mm | mm | mm |
| 702-705 | 23,90 | 23,30 | 2,50 | 2,65 | 1,00 | 0,60 |
| 708 | 23,90 | 23,30 | 2,98 | 3,13 | 1,48 | 1,08 |
| 712-715 | 26,20 | 25,60 | 2,55 | 2,65 | 1,05 | 0,60 |
| Stellwellengewinde/ Filetage de la tige/ Stem thread: Ø 0,90 mm | | | | Weg/ Chemin/ Length of travel: 0,80 mm | | |

2. Funktionen

2. Fonctions

2. Functions

| Kaliber | Stellwellenpos. | Funktionen |
|---------------------|-----------------|--|
| Calibre | Pos. de tige | Fonctions |
| Caliber | Stem position | Functions |
| 702-703 | 1 | Normale Position / Position normale / Running position |
| | 2 | Zeiger stellen, Sekunden-Stopp mit Unterbruch der Motorimpulse |
| 712-713 | 1 | Normale Position / Position normale / Running position |
| | 2 | Mise à l'heure, stop-seconde avec interruption des impulsions moteur Hand setting, stop-second with interruption of motor impulses |
| 705-708, 715 | 1 | Normale Position / Position normale / Running position |
| | 2 | Datumkorrektur / Correction de la date / Date correction |
| | 3 | Zeiger stellen, Mond stellen, Sekunden-Stopp mit Unterbruch der Motorimpulse Réglage heure/phase lunaire, stop-seconde avec interruption des impulsions moteur Hand setting, moon setting, stop-second with interruption of motor impulses |
| 705/708/715 | | Sperrzeiten für Kalenderschnellkorrektur: 21'30 - 03'00 Uhr Restrictions: ne pas faire de correction rapide du calendrier entre 21'30 et 03'00 h Prohibition: do not use quick change date function between 21'30 and 03'00 h |



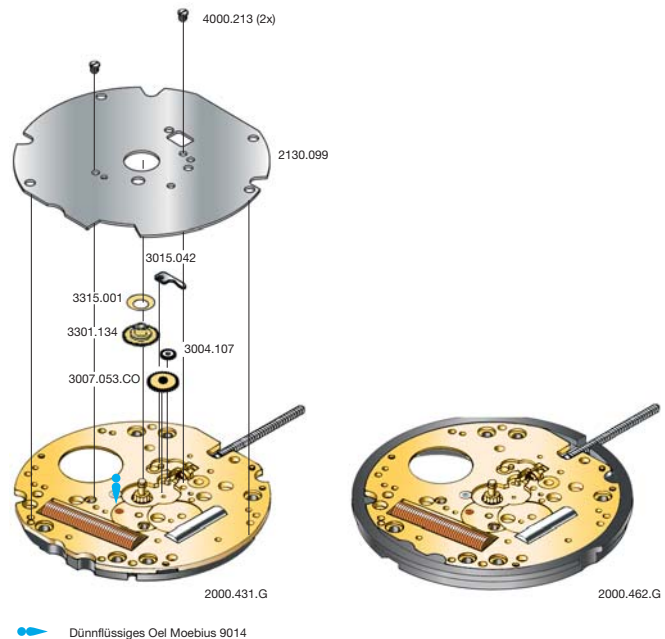
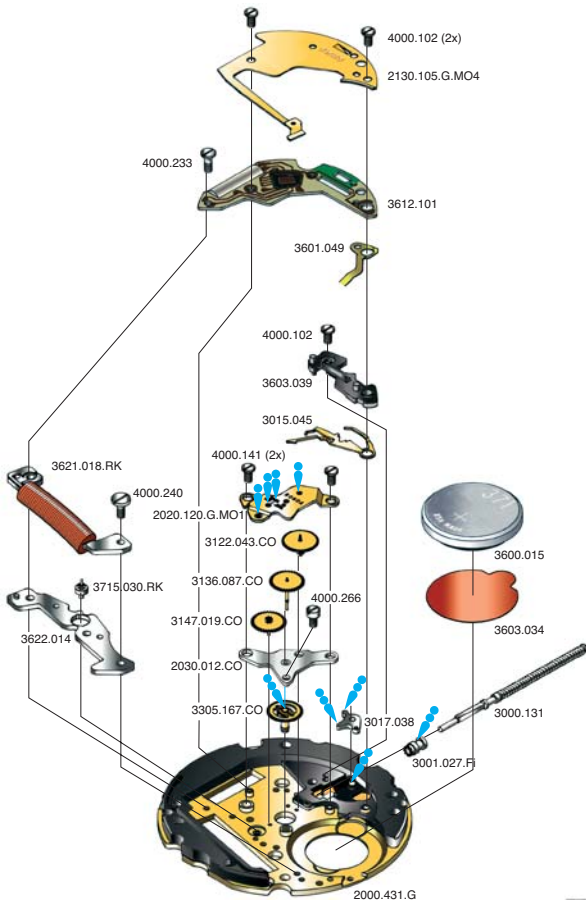
Werkaufbau

Assemblage

Assembling

10 1/2''' 702, 703, 705, 708
 11 1/2''' 712, 713, 715

10 1/2''' 702, 703
 11 1/2''' 712, 713



••••• Düninflüssiges Oel Moebius 9014
 ••••• Fett Moebius, Microgliss D5, Jisma 124

••••• Düninflüssiges Oel Moebius 9014

Abweichungen / Divergences / Deviations

| Cal. 702 | Werkseite / Côté mouvement / Movement side | | |
|-------------|--|---------------|---------------|
| Plan No. | Bestandteile | Fournitures | Spare Parts |
| 3136.093.CO | Sekundenrad | Roue secondes | Second wheel |
| 3305.176.CO | Minutenrohr | Chaussée | Cannon pinion |

| Cal. 705 | Werkseite / Côté mouvement / Movement side | | |
|----------|--|-------------|-------------|
| Plan No. | Bestandteile | Fournitures | Spare Parts |
| 3015.040 | Wippe | Bascule | Yoke |

| Cal. 708 | Werkseite / Côté mouvement / Movement side | | |
|-------------|--|---------------|---------------|
| Plan No. | Bestandteile | Fournitures | Spare Parts |
| 2030.014.CO | Zentrumbrücke | Pont centre | Centre bridge |
| 3015.040 | Wippe | Bascule | Yoke |
| 3136.090.CO | Sekundenrad | Roue secondes | Second wheel |
| 3305.171.CO | Minutenrohr | Chaussée | Cannon pinion |

| Cal. 712 | Werkseite / Côté mouvement / Movement side | | |
|-------------|--|---------------|---------------|
| Plan No. | Bestandteile | Fournitures | Spare Parts |
| 2000.462.G | Werkplatte | Platine | Main plate |
| 3000.155 | Stellwelle | Tige | Stem |
| 3136.093.CO | Sekundenrad | Roue secondes | Second wheel |
| 3305.176.CO | Minutenrohr | Chaussée | Cannon pinion |

| Cal. 713 | Werkseite / Côté mouvement / Movement side | | |
|------------|--|-------------|-------------|
| Plan No. | Bestandteile | Fournitures | Spare Parts |
| 2000.462.G | Werkplatte | Platine | Main plate |
| 3000.155 | Stellwelle | Tige | Stem |

| Cal. 715 | Werkseite / Côté mouvement / Movement side | | |
|------------|--|-------------|-------------|
| Plan No. | Bestandteile | Fournitures | Spare Parts |
| 2000.462.G | Werkplatte | Platine | Main plate |
| 3000.155 | Stellwelle | Tige | Stem |
| 3015.040 | Wippe | Bascule | Yoke |

| Plan No. | Bestandteile | Fournitures | Spare Parts |
|----------------|--------------------|----------------|--------------------|
| 2000.431.G | Werkplatte | Platine | Main plate |
| 2020.120.G.MO1 | Räderwerkbrücke | Pont rouge | Train w. bridge |
| 2030.012.CO | Zentrumbrücke | Pont centre | Centre bridge |
| 2130.105.G.MO4 | Modul-Abdeckp. | Couvre module | Module cover pl. |
| 3000.131 | Stellwelle | Tige | Stem |
| 3001.027.FI | Kupplungstrieb | Pignon coulant | Sliding pinion |
| 3015.045 | Wippe | Bascule | Yoke |
| 3017.038 | Winkelhebel | Tirette | Setting lever |
| 3122.043.CO | Kleinbodenrad | Roue moyenne | Third wheel |
| 3136.087.CO | Sekundenrad | Roue secondes | Second-wheel |
| 3147.019.CO | Zwischenrad | Roue interméd. | Intermed. wheel |
| 3305.167.CO | Minutenrohr | Chaussée | Cannon pinion |
| 3600.015 | Batterie | Pile | Battery |
| 3601.049 | Batterie-Kontakt | Bride contact | Battery contact |
| 3603.034 | Batterie-Isolation | Isolateur pile | Battery insulation |
| 3603.039 | Deckplatte | Couvre mécan. | Setting lev. cover |
| 3612.101 | Modul | Module | Module |
| 3621.018.RK | Spule | Bobine | Coil |
| 3622.014 | Stator | Stator | Stator |
| 3715.030.RK | Rotor | Rotor | Rotor |
| 4000.102 | Schraube | Vis | Screw |
| 4000.141 | Schraube | Vis | Screw |
| 4000.233 | Schraube | Vis | Screw |
| 4000.240 | Schraube | Vis | Screw |
| 4000.266 | Schraube | Vis | Screw |

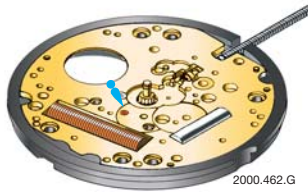
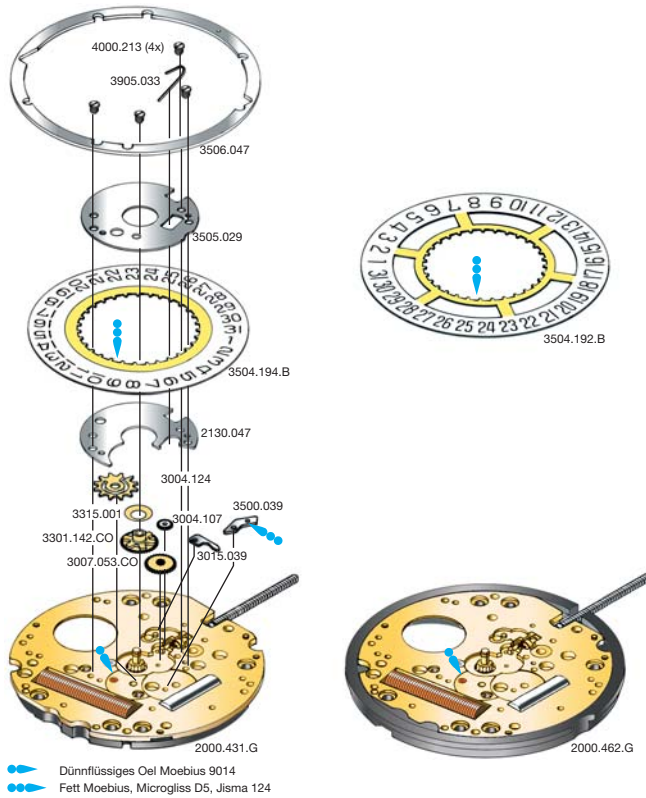
Werkaufbau

Assemblage

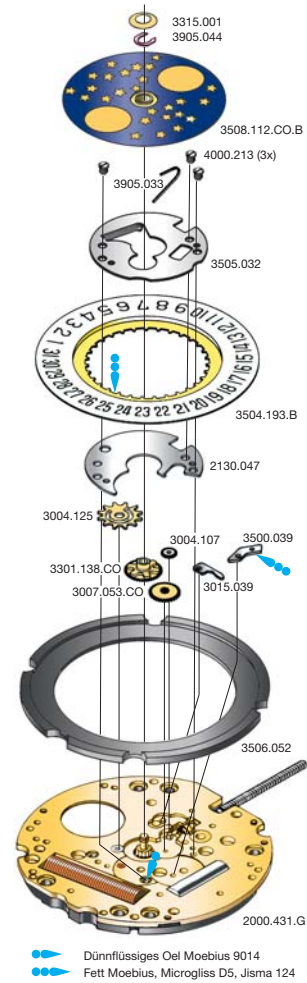
Assembling

10 1/2''' 705

11 1/2''' 715



10 1/2''' 708



Abweichungen / Divergences / Deviations

| Cal. 702, 703 Zifferblattseite / Côté cadran / Dial side | | | |
|--|-------------------|-----------------|-------------------|
| Plan No. | Bestandteile | Fournitures | Spare Parts |
| 2130.099 | Zeigerw.-haltepl. | Plaque maintien | Maintaining plate |
| 3015.042 | Wippe unten | Bascule dessous | Yoke sec.-yoke |
| 3301.134 | Stundenrad | Canon | Hour wheel |

| Cal. 708 Zifferblattseite / Côté cadran / Dial side | | | |
|---|--------------------|-------------------|--------------------|
| Plan No. | Bestandteile | Fournitures | Spare Parts |
| 3004.125 | Datummitn.-rad | Renvoi entrain. | Ind. driv. wheel |
| 3301.138.CO | Stundenrad | Canon | Hour wheel |
| 3504.193.B | Datumanzeiger | Bague | Date indicator |
| 3505.032 | Kalenderdeckplatte | Couvercle calend. | Date ind. guard |
| 3506.052 | Zifferblattstützr. | Support cadran | Dial support |
| 3508.112.CO.B | Mondscheibe | Disque lune | Moon indicator |
| 3905.044 | Klemme Monds. | Clavette disque | Moon ind. sp. clip |

| Cal. 712/713 Zifferblattseite / Côté cadran / Dial side | | | |
|---|-------------------|-----------------|-------------------|
| Plan No. | Bestandteile | Fournitures | Spare Parts |
| 2000.462.G | Werkplatte | Platine | Main plate |
| 2130.099 | Zeigerw.-haltepl. | Plaque maintien | Maintaining plate |
| 3015.042 | Wippe unten | Bascule dessous | Yoke sec.-yoke |
| 3301.134 | Stundenrad | Canon | Hour wheel |

| Cal. 715 Zifferblattseite / Côté cadran / Dial side | | | |
|---|---------------|-------------|----------------|
| Plan No. | Bestandteile | Fournitures | Spare Parts |
| 2000.462.G | Werkplatte | Platine | Main plate |
| 3405.192.B | Datumanzeiger | Bague | Date indicator |

| Cal. 705 Zifferblattseite / Côté cadran / Dial side | | | |
|---|---------------------|--------------------|------------------|
| Plan No. | Bestandteile | Fournitures | Spare Parts |
| 2000.431.G | Werkplatte | Platine | Main plate |
| 2130.047 | Kalenderplatte | Plaque calendrier | Date ind. plate |
| 3004.107 | Zeigerstellrad | Renvoi minuterie | Setting wheel |
| 3004.124 | Datummitn.-rad | Renvoi entrain. | Ind. driving wh. |
| 3007.053.CO | Wechselrad | Minuterie | Minute wheel |
| 3015.039 | Wippe unten | Bascule dessous | Lower sec. yoke |
| 3301.142.CO | Stundenrad | Canon | Hour wheel |
| 3315.001 | Spreizfeder 2 1/2 | Clinquant 2 1/2 | Washer 2 1/2 |
| 3500.039 | Datumraste | Cliquet calendrier | Date jumper |
| 3504.194.B | Datumanzeiger | Bague | Date indicator |
| 3505.029 | Kal.-Abdeckplatte | Couvercle calend. | Date ind. guard |
| 3506.047 | Zifferbl.-Stützring | Support cadran | Dial support |
| 3905.033 | Feder Datumraste | Ressort cliquet | Date jumper spr. |
| 4000.213 | Schraube | Vis | Screw |


Batterien / Piles / Batteries

| | | |
|------------------|------------|-------------|
| 702-708, 712-715 | Nr. 371 | SR 920 SW |
| | Dim.Ø x H: | 9,50 x 2,06 |

3. Leistungen

3. Performances

3. Performances

| Kaliber Calibre Caliber | Bedingungen Conditions Conditions | Momentaner Gang Marche instantanée Instantaneous rate | Stromaufnahme Consommation courant Power consumption | Drehmoment Couple utile Torque | Gangreserve Autonomie Autonomy |
|---|---|---|--|--------------------------------------|--|
| | Einheit / Unité / Unit Typ.Wert / Valeur / value | Mi (s/month) | I (µA) | T (µNm) sec. min. | A (Monat/mois/month) |
| 702-715 | 1,55 V 23°C Batt./ Pile 43,0 mAh | - 10/+ 20 | 0,80 | 8 440 | 74 |
| Magnetfeldabschirmung / Résist. aux champs magn. / Resist. to magnetic fields | | | 18,8 Oe | 1500 A/M | Norm  |
| 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

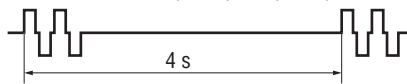
The second hand stops for 4 seconds before executing rapidly the 4 steps.

Folgende Kaliber sind mit dem EOL-System ausgerüstet:

Les calibres suivants sont munis du système EOL:

The following calibers are equipped with EOL:

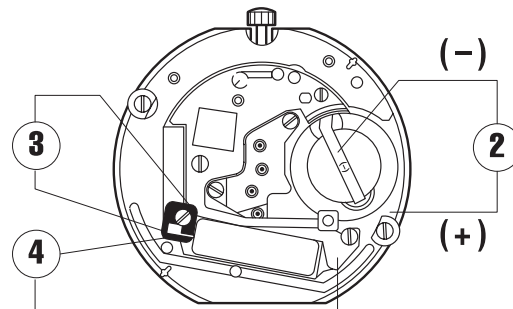
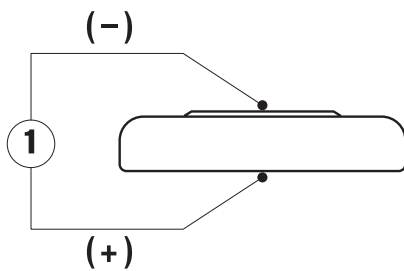
Swiss Made 703, 705, 708, 713, 715



4. Elektr. Messungen

4. Contrôles électriques

4. Electrical checking



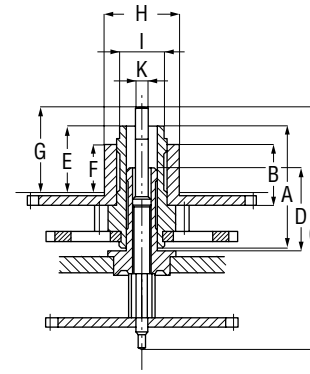
| Kaliber Calibre Caliber | Pos. Pos. Pos. | Einheit Unité Unit | Messwerte Valeurs mesurées Measured values | Kontrolle Contrôle Check | Bemerkungen Remarques Remarks |
|-------------------------------|----------------------|---------------------------------------|--|---|---|
| 702-715 | 1 | V | 1,55 | Batterie-Spannung Tension de la pile Battery voltage | Batterie herausnehmen und messen Enlever et mesurer la pile Remove battery for measuring |
| 702-715 | 2 | µA | 0,80 < 1,13 | Stromaufnahme Consommation de courant Power consumption | Ohne Batterie, mit externer Speisung Sans pile, avec alimentation externe Without battery, with external power supply |
| 702-715 | 2 | V | < 1,35 | 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 |
| 702-715 | 3 | KΩ | 1,70-2,40 | Spulenwiderstand Résistance de la bobine Resistance of the coil | Ohne Batterie Sans pile Without battery |
| 702-715 | 4 | KΩ | ∞ | Spulenisolation Isolation de la bobine Coil insulation | Ohne Batterie Sans pile Without battery |
| 702-715 | | 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 |

5. Zeigerwerk

5. Aiguillage

5. Dial-train

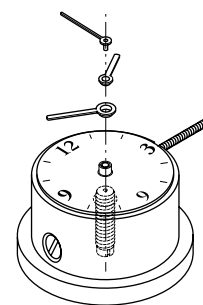
| Kaliber Calibre Caliber | Zeigerwerk Aiguillage Height of dial train | Einzelteil-Höhe mm | | | | Höhe ab Zifferblattaufgabe mm | | |
|-------------------------------|---|-----------------------------|------|------|------|-------------------------------|------|------|
| | | Hauteur de la pièce ind. mm | | | | Dépassement platine mm | | |
| | | A | B | C | D | E | F | G |
| 702, 712 | 0 | 2,12 | 1,12 | 2,83 | 1,62 | 0,93 | 0,65 | - |
| 703, 705, 713, 715 | | 2,09 | 1,12 | 3,67 | 1,62 | 0,90 | 0,65 | 1,20 |
| 708 | | - | - | - | - | - | - | - |
| 702, 712 | 1 | 2,32 | 1,27 | 2,83 | 1,62 | 1,13 | 0,80 | - |
| 703, 705, 713, 715 | | 2,29 | 1,27 | 3,92 | 1,62 | 1,10 | 0,80 | 1,45 |
| 708 | | 2,77 | 1,75 | 4,44 | 2,09 | 1,10 | 0,80 | 1,45 |
| 702, 712 | 2 | 2,52 | 1,47 | 2,83 | 1,62 | 1,30 | 1,00 | - |
| 703, 705, 713, 715 | | 2,49 | 1,47 | 4,12 | 1,62 | 1,30 | 1,00 | 1,65 |
| 708 | | - | - | - | - | - | - | - |



Die Zeiger dürfen nur bei zentral abgestützter Räderwerkbrücke gesetzt werden.
Der Aufpressdruck darf 25 N (2,5 kp) nicht übersteigen.

Lors de la pose des aiguilles, le pont de rouage doit être soutenu.
La force de chassage ne doit pas dépasser 25 N (2,5 kp).

Hands can only be set if train wheel bridge is supported by a movement holder.
Pressure while setting hands must not exceed 25 N (2,5 kp).



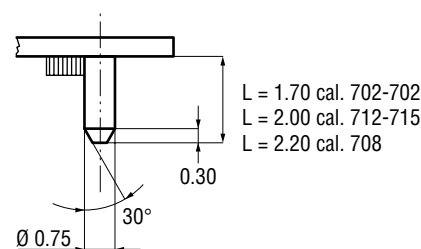
6. Einschalen

6. Emboîtage

6. Casing

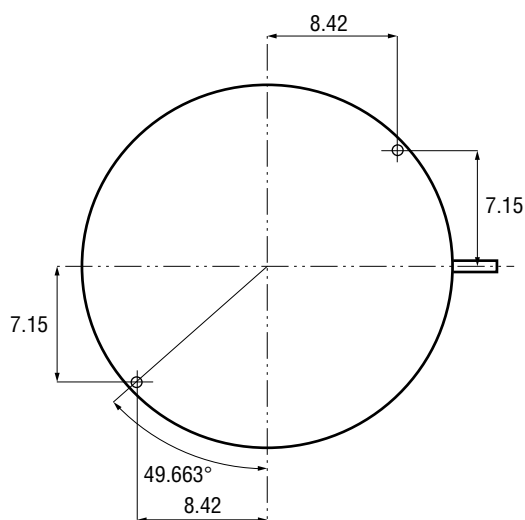
| Ø Zeigeranpassung mm | mm | mm |
|----------------------------|------|------|
| Ø Ajustement des aiguilles | mm | mm |
| Ø Adjustment of hands | mm | mm |
| H | I | K |
| 1,20 | 0,70 | 0,20 |

| Zifferblattstärke mm | mm |
|----------------------|------|
| Épaisseur du cadran | mm |
| Dial thickness | mm |
| 0 | 0,30 |
| 1 standard | 0,40 |

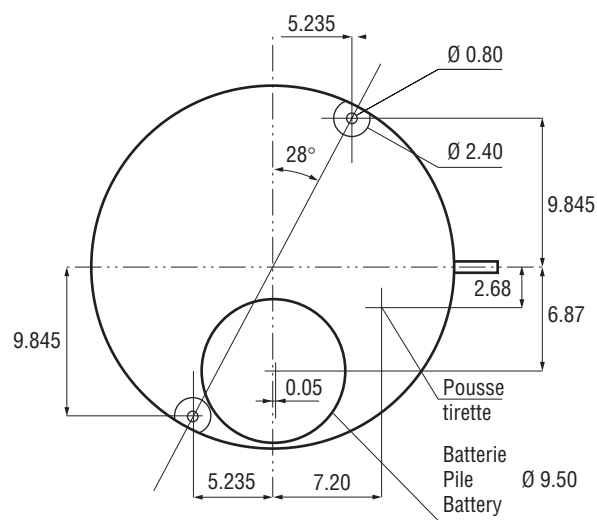


Für Einzelheiten verlangen Sie bitte die entsprechenden Zeigerwerkpläne!
Pour plus de détails demandez nos plans d'aiguillage!
For more detailed information please ask for the corresponding hand drawings!

10 1/2 "" 702, 703, 705, 708



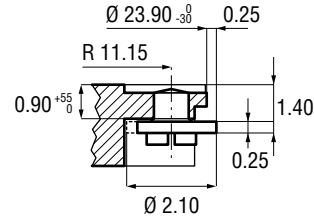
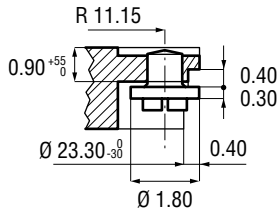
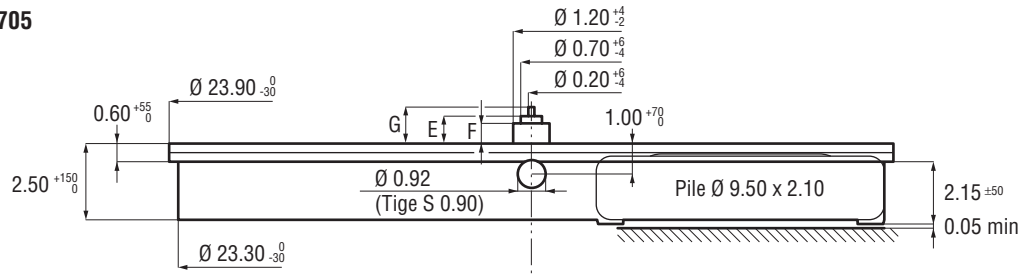
Zifferblattseite
Côté cadran
Dial side



Seite gegen Gehäuseboden
Côté fond de boîte
Case back side

10 1/2 "" 702, 703, 705

Gehäuseplan
Plan de cage
Case drawing

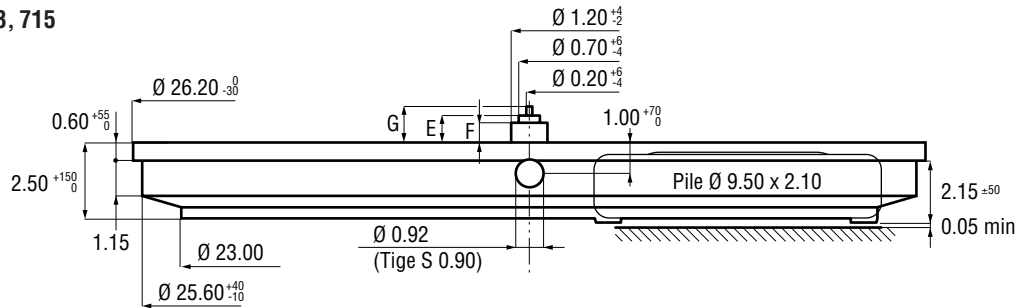


Werkbefestigungsschraube
Vis d'emboîtage
Disc screw for casing
No. 4000.236

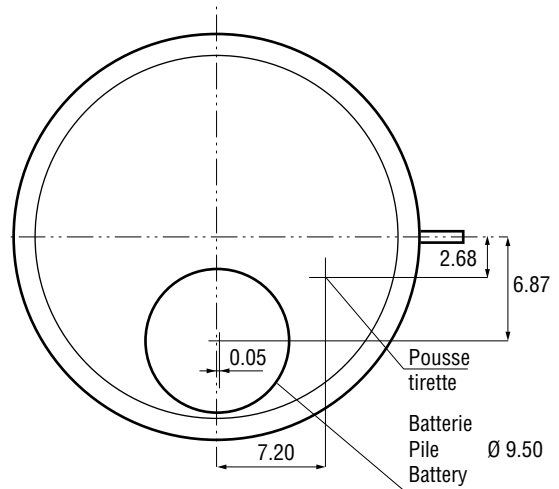
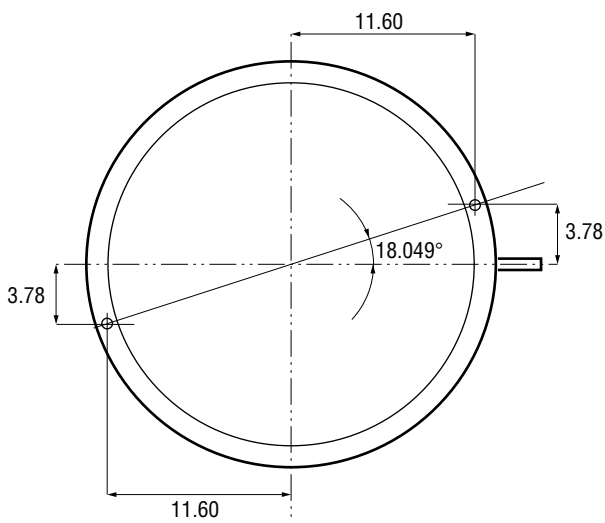
Werkbefestigungsschraube
Vis d'emboîtage
Disc screw for casing
No. 4000.237

11 1/2 "" 712, 713, 715

Gehäuseplan
Plan de cage
Case drawing



Einschalen ohne Werkbefestigungsschrauben
A emboîter sans vis d'emboîtage
Casing without disc screw



Zifferblattseite
Côté cadran
Dial side

Seite gegen Gehäuseboden
Côté fond de boîte
Case back side