

Cal. VK61A

ϕ 30.80 mm

H 5.10 mm

Item	Version No.
Specification - 1	Version 1
Specification - 2	Version 1
Appearance	Version 1
Casing	Version 1
Hand Fitting	Version 1
Hand Setting Stem	Version 1
Dial	Version 1
Assembly Plan - 1	Version 1
Assembly Plan - 2	Version 1
Hands	Version 1

CAL. VK61A 13 ½ Ligne Quartz Movement

Two Hands with 1/5 Center Chronograph Second (maximum count for 60 minutes per cycle),
Small Second, Small Chronograph Minute, Date

1. MOVEMENT DIMENSIONS

- Outside diameter ϕ 30.80mm (12H~6H) x 29.10mm (3H~9H)
- Casing diameter ϕ 29.00mm (12H~6H)
- Total height 5.10 mm
- Dimensions of small hands away from center 7.50 mm

2. BASIC FUNCTION

- Jewels 0 jewel
- Regulation device Nil
- Accuracy ± 20 seconds per month at normal temperature range
- Battery life Approx. 3 years
- Operation temperature range From - 5 °C to + 50 °C
- Antimagnetism ≥ 1600 A / m
- (direct current magnetic field)
- Shock resistance On equal level with general quartz movement
- Hands

	Regulation hands unbalance	The moment of inertia
Hour	Less than 0.50 μ N·m (50mg·mm)	-----
Minute	Less than 0.60 μ N·m (60mg·mm)	-----
Small sec.	Less than 0.05 μ N·m (5mg·mm)	-----
Center chrono. second	Less than 0.20 μ N·m (20mg·mm)	Less than 400mg·mm ²
Chrono. minute	Less than 0.05 μ N·m (5mg·mm)	Less than 30mg·mm ²

3. OSCILLATOR

- Type of quartz oscillator Tuning fork
- Frequency of quartz oscillator 32,768 Hz

4. BATTERY

- Type Silver oxide battery
- Voltage 1.55 V
- Size ϕ 9.5 x t 3.6 (mm)
- Recommended battery SR936SW (SEIZAIKEN)

5. DIAL FIXED METHOD

Dial legs fitted with holes on the main plate

6. TEST OF ACCURACY

- Equipment to be used SEIKO Quartz Tester QT - 99
Greiner Quartz Timer - C
Witschi Q-Tester 4000
- Duration of measurement 10 seconds
- Microphone to be used Electromagnetic detection type

*** All specifications are subject to change without notice.**

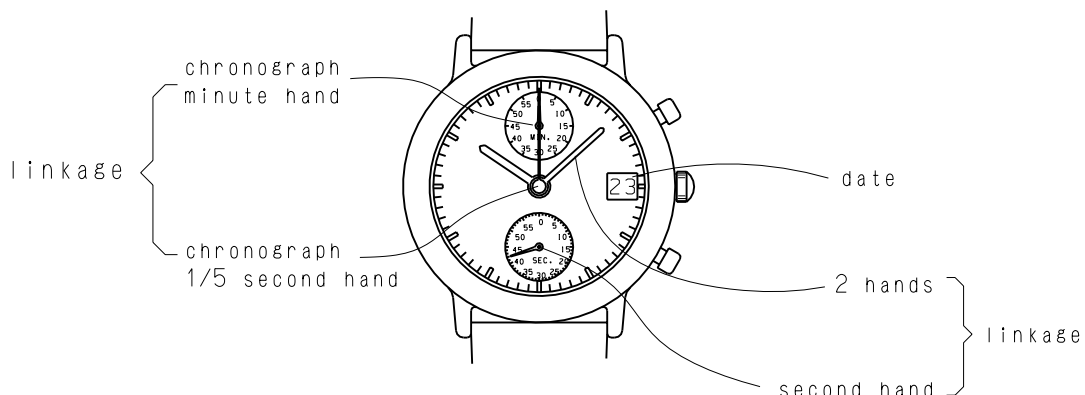
Movement Specification-2

CAL. VK61A

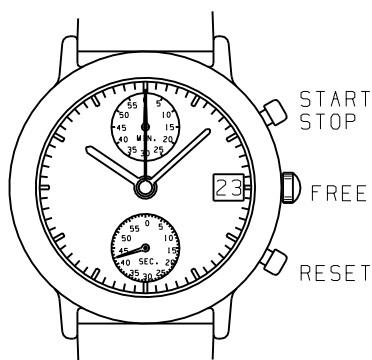
OPERATION

2 step motors

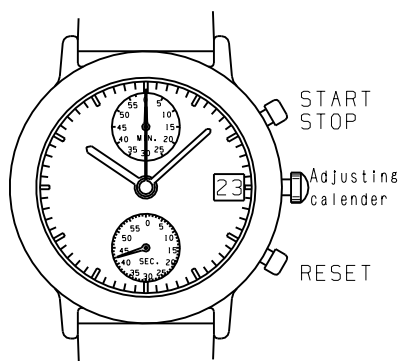
(2 hands with calendar, second hand, 1/5sec.chrono.maximum 60minutes)



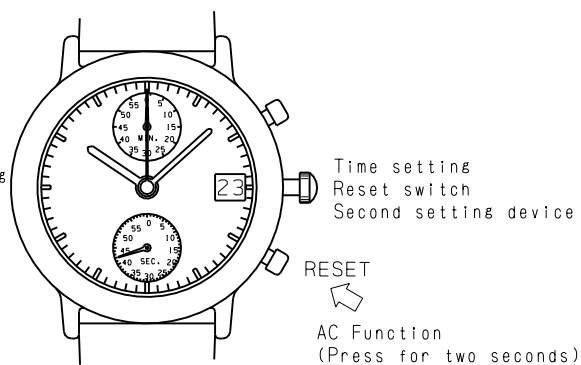
Normal Position



1st click
adjusting calendar
(clockwise)



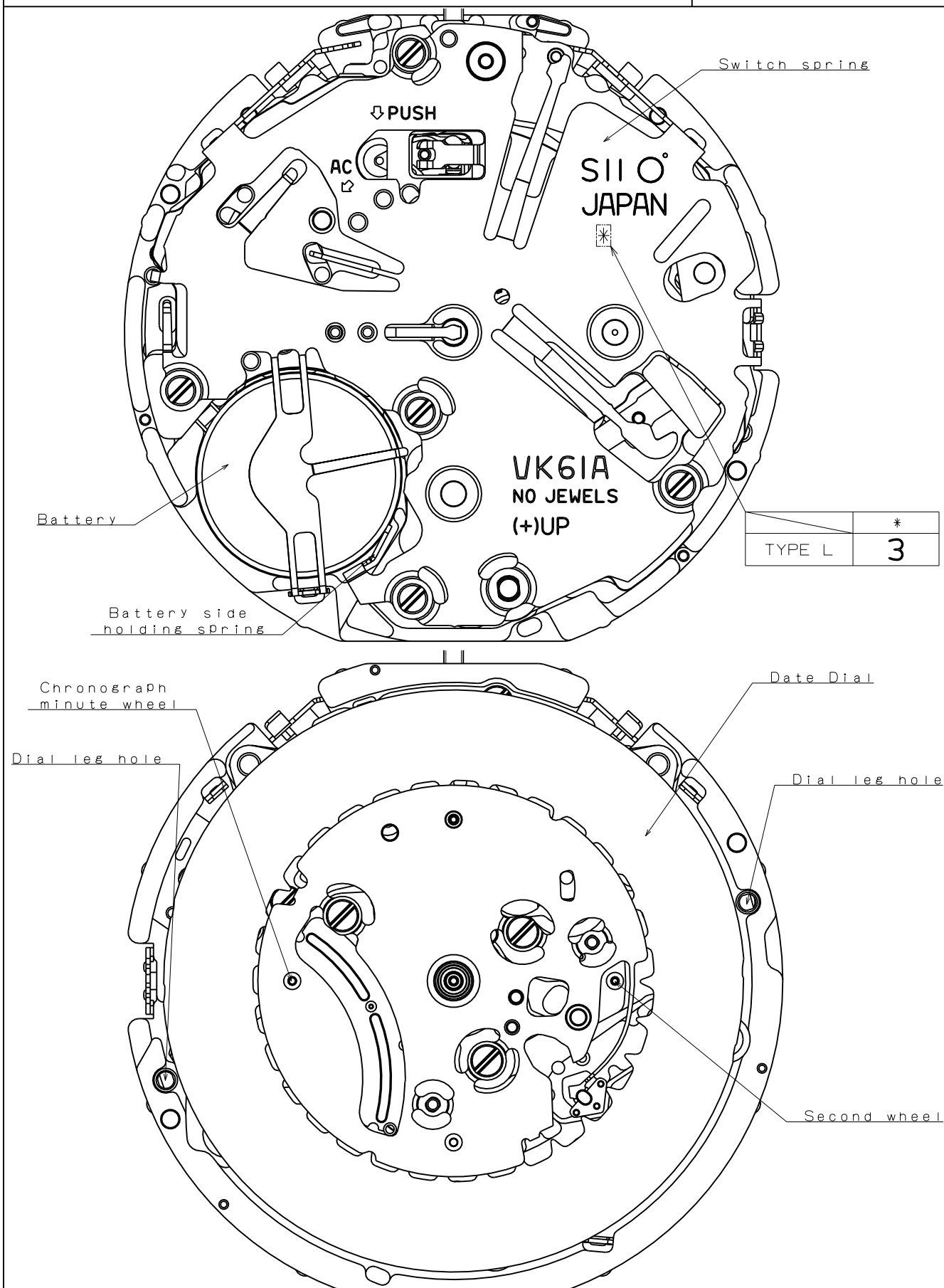
2nd click
adjusting time



*After AC and the crown is returned to normal position, the second hand will move at two-second interval for 10 seconds.

*If the chronograph hand positions are incorrect, pushing the RESET button will return the hands to their appropriate positions.

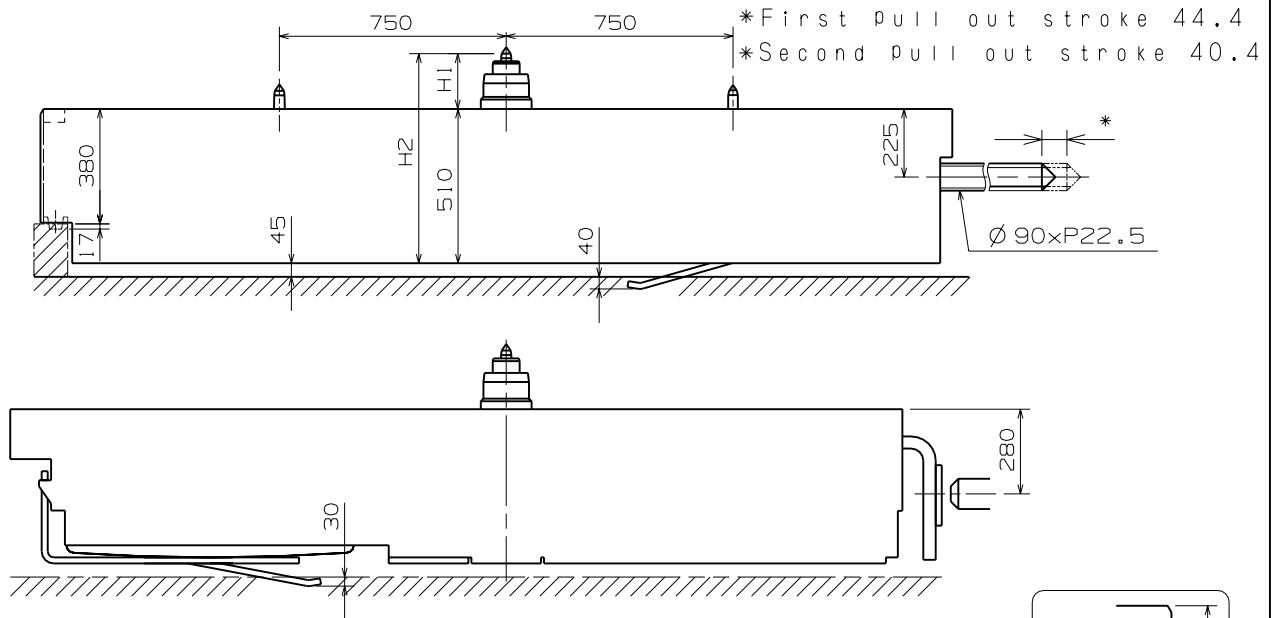
Version : 1



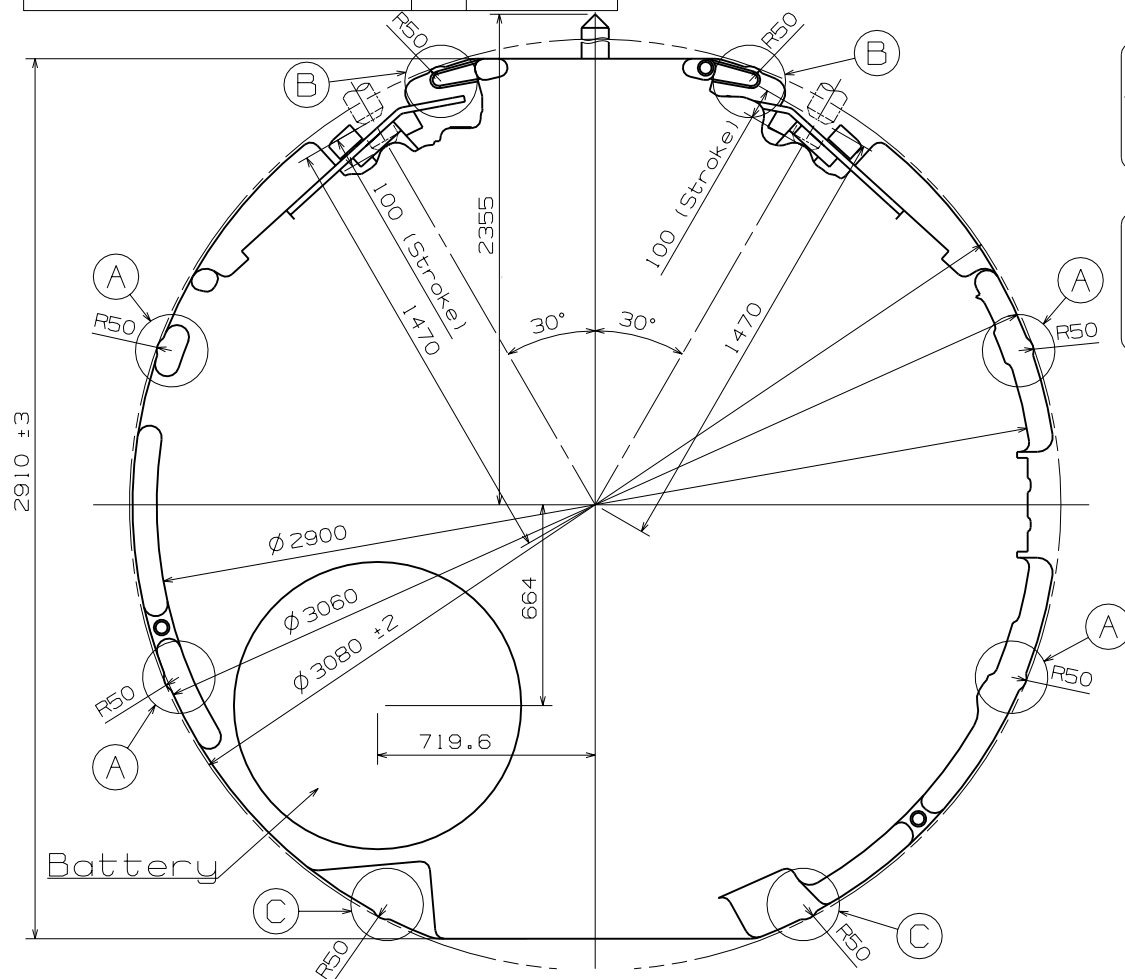
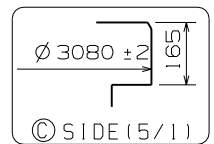
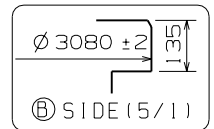
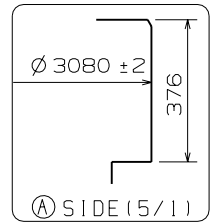
Scale : 4/1

Unit : 1=1/100mm

Version : 1



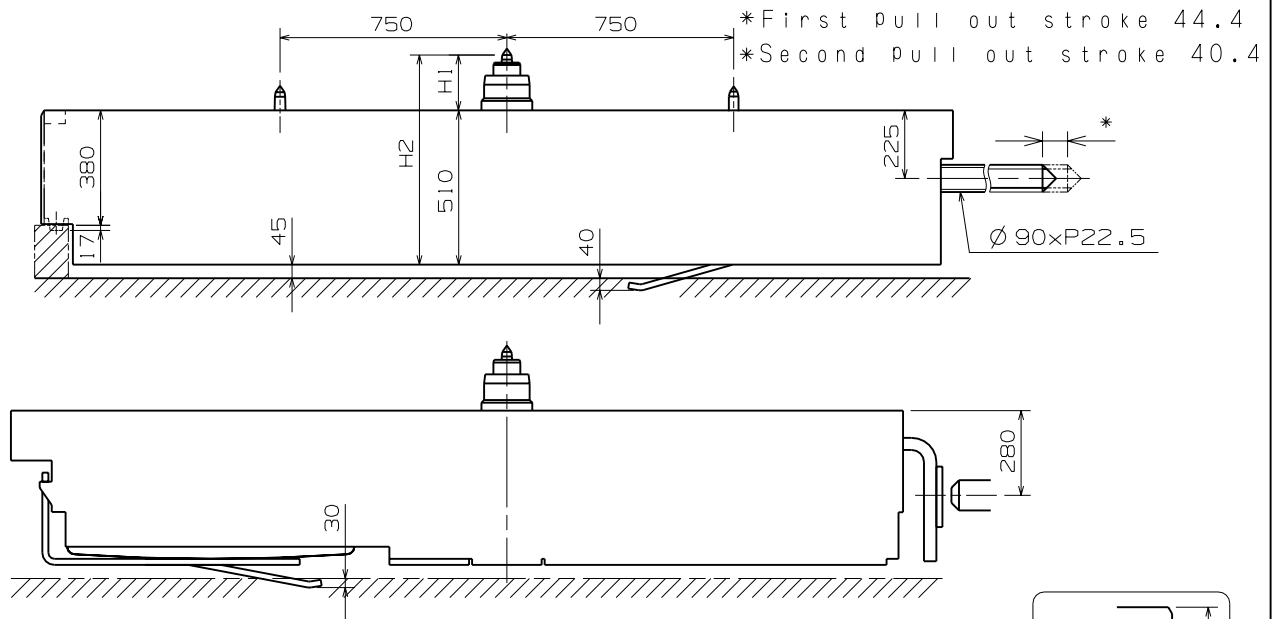
Center post		TYPE L
Maximum height from main Plate surface	H1	214
Total height incl. movement	H2	724



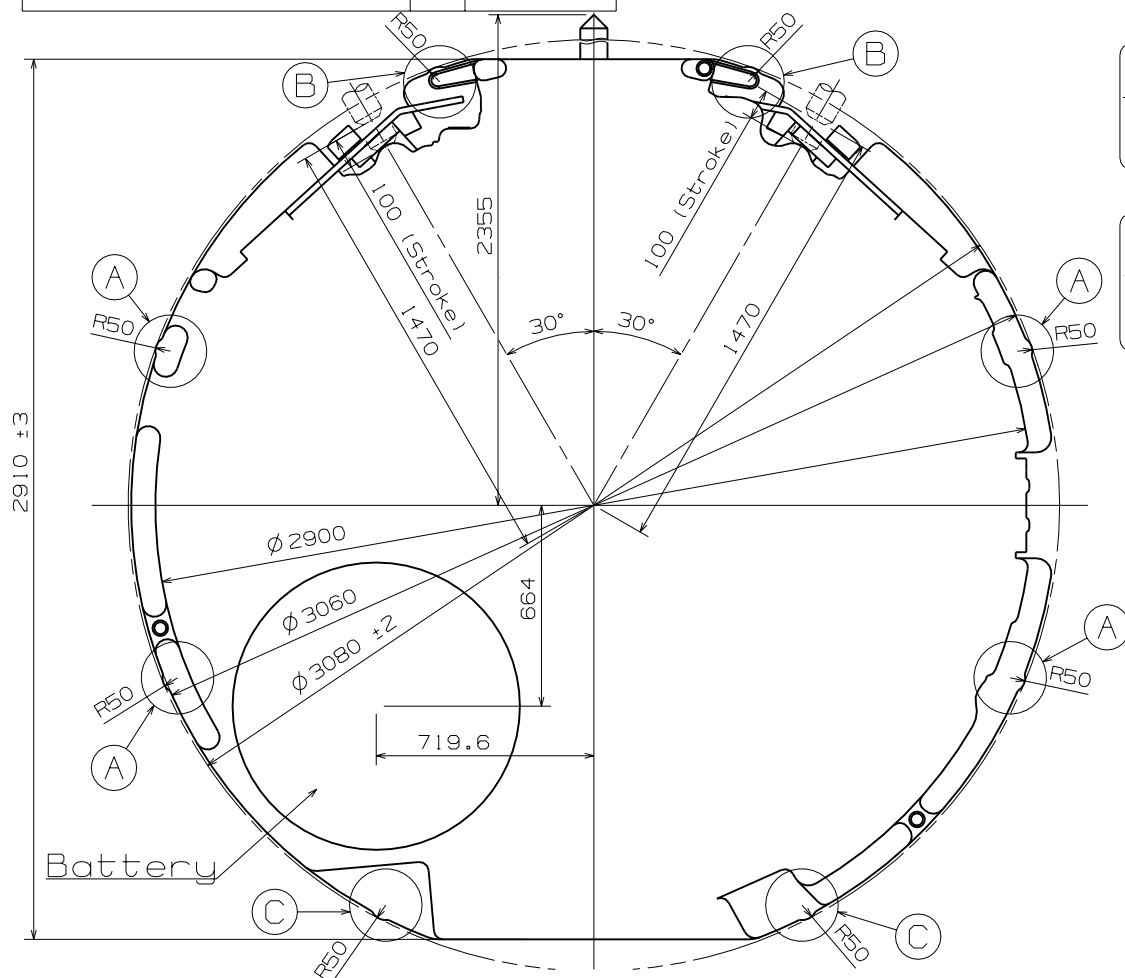
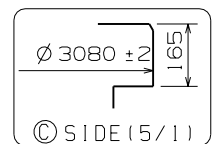
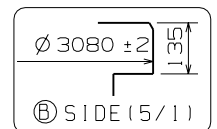
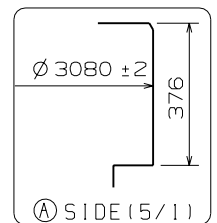
Scale : 4/1

Unit : 1=1/100mm

Version : 1



Center post 中心柱位		Type L 高針
Maximum height from main plate surface 與機芯平面之最大高度	H1	214
Total height incl. movement 機芯總高度	H2	724



Scale : 4/1

Unit : 1=1/100mm

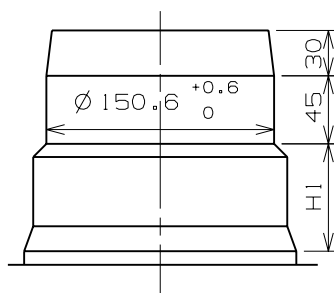
Version : 1

Hand Fitting

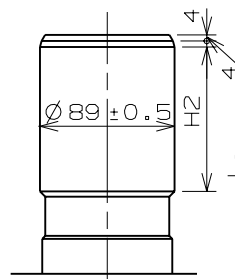
Cal. VK61A

- *Hour hand unbalance $\leq 0.5 \mu\text{N}\cdot\text{m}$ (50mg·mm)
- *Minute hand unbalance $\leq 0.6 \mu\text{N}\cdot\text{m}$ (60mg·mm)
- *Second hand unbalance $\leq 0.05 \mu\text{N}\cdot\text{m}$ (5mg·mm)
- *Chronograph 1/5 second hand unbalance $\leq 0.20 \mu\text{N}\cdot\text{m}$ (20mg·mm)
- *Chronograph minute hand unbalance $\leq 0.05 \mu\text{N}\cdot\text{m}$ (5mg·mm)

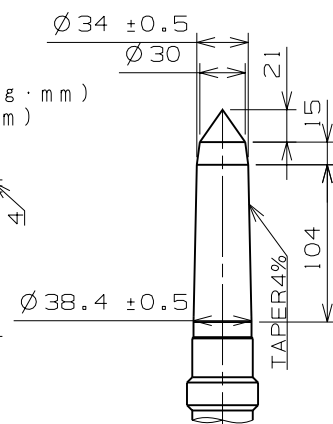
	H1	H2
TYPE L	91	122.5



Hour wheel

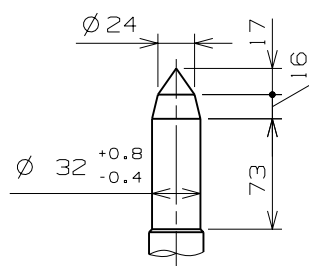


Center wheel

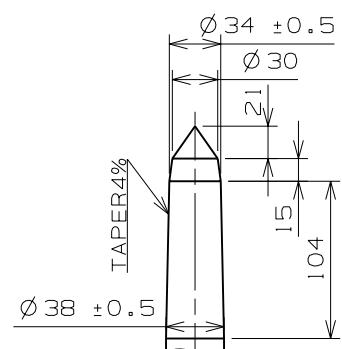


Chronograph 1/5 second wheel

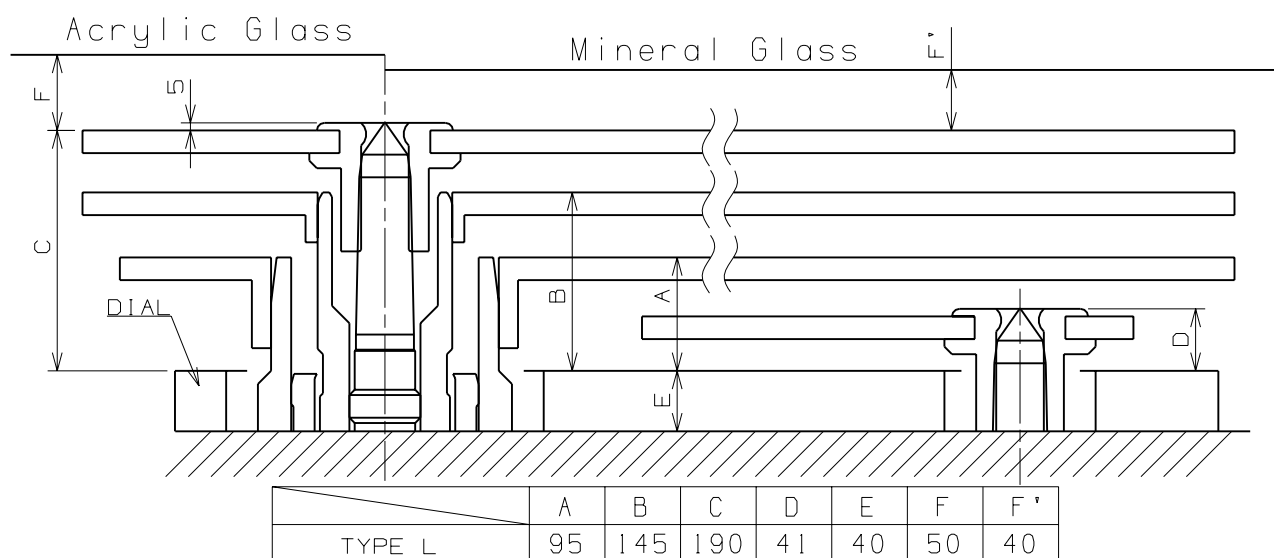
Parts name	Parts No.
	TYPE L
Hour wheel	0273 0410
Center wheel	0221 0910
Second wheel	0240 0180
Chronograph minute wheel	0902 0110
Chronograph 1/5 second wheel	0888 0180



Second wheel



Chronograph minute wheel



*Do not reuse the chronograph hands once detached.
Please change and use new hands.

Scale : 20/1

Unit : 1=1/100mm

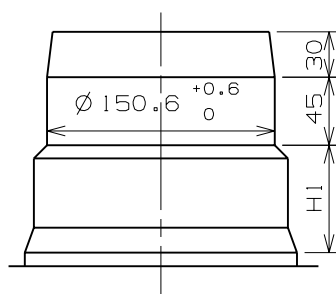
Version : 1

Hand Fitting

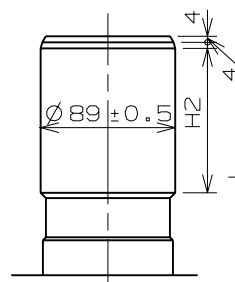
Cal. VK61A

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- *Second hand unbalance $\leq 0.05 \mu\text{N}\cdot\text{m}$ (5mg·mm)
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- *Chronograph minute hand unbalance $\leq 0.05 \mu\text{N}\cdot\text{m}$ (5mg·mm)

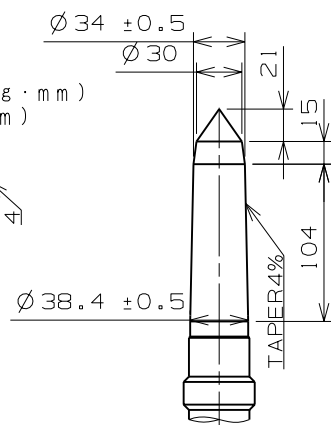
	H1	H2
Type L 高針	91	122.5



Hour wheel

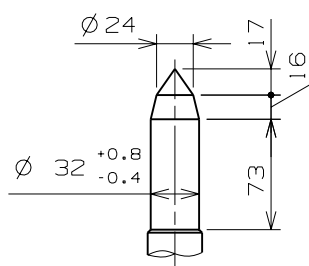


Center wheel

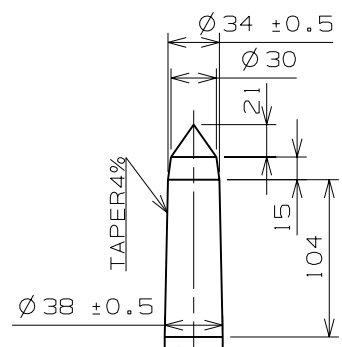


Chronograph
1/5second wheel

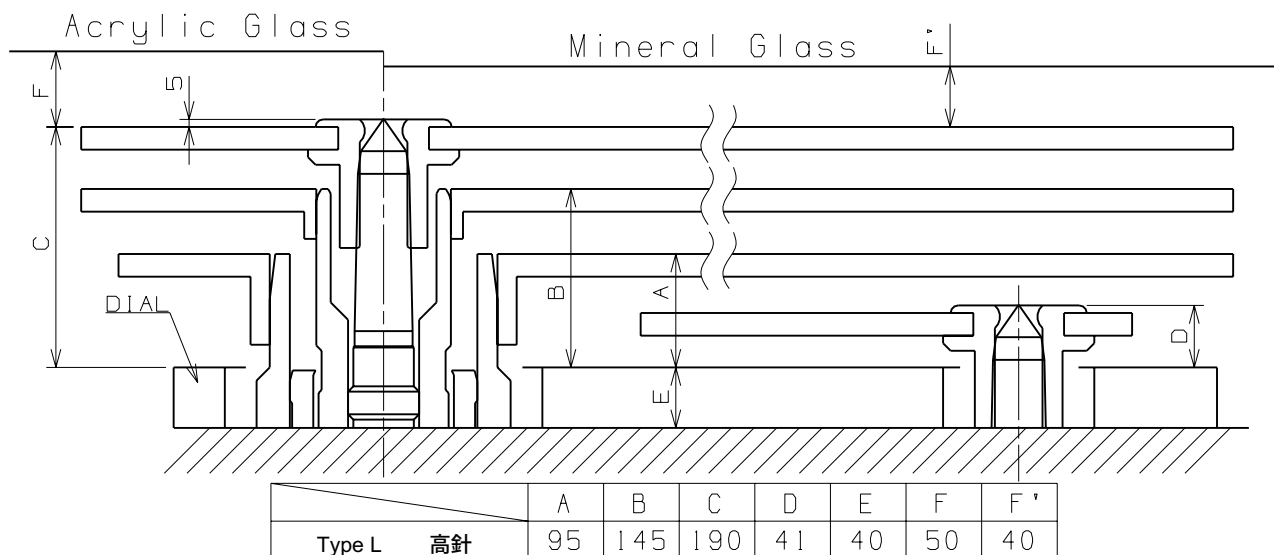
Parts name	Parts No.
	Type L 高針
Hour wheel 時針輪	0273 0410
Center wheel 分針輪	0221 0910
Second wheel 秒針輪	0240 0180
Chronograph minute wheel 計時分針輪	0902 0110
Chronograph 1/5 sec. wheel 1/5計時秒針輪	0888 0180



Second wheel



Chronograph minute wheel

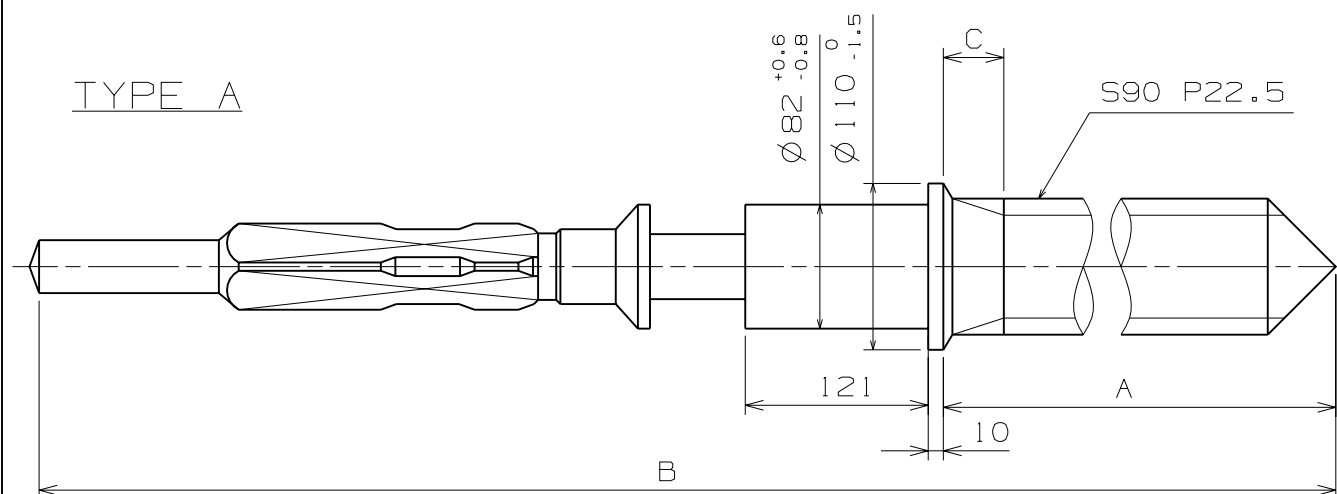


*Do not reuse the chronograph hands once detached.
Please change and use new hands.

Scale : 20/1

Unit : 1=1/100mm

Version : 1

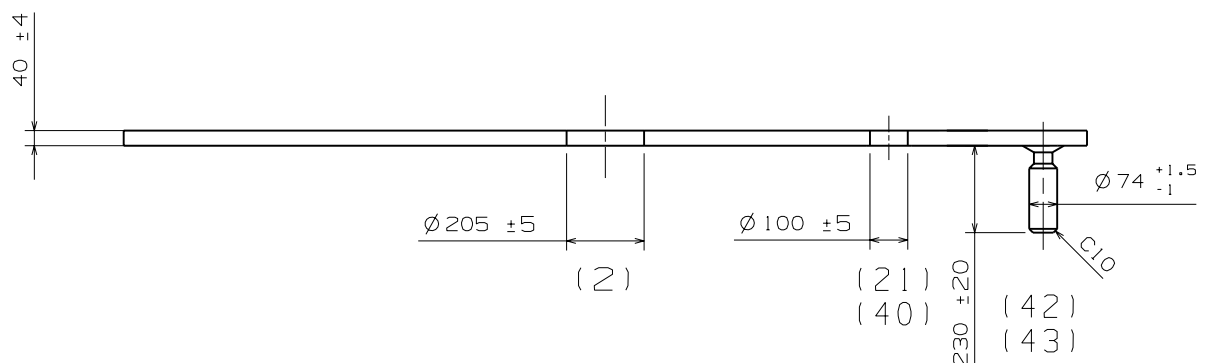
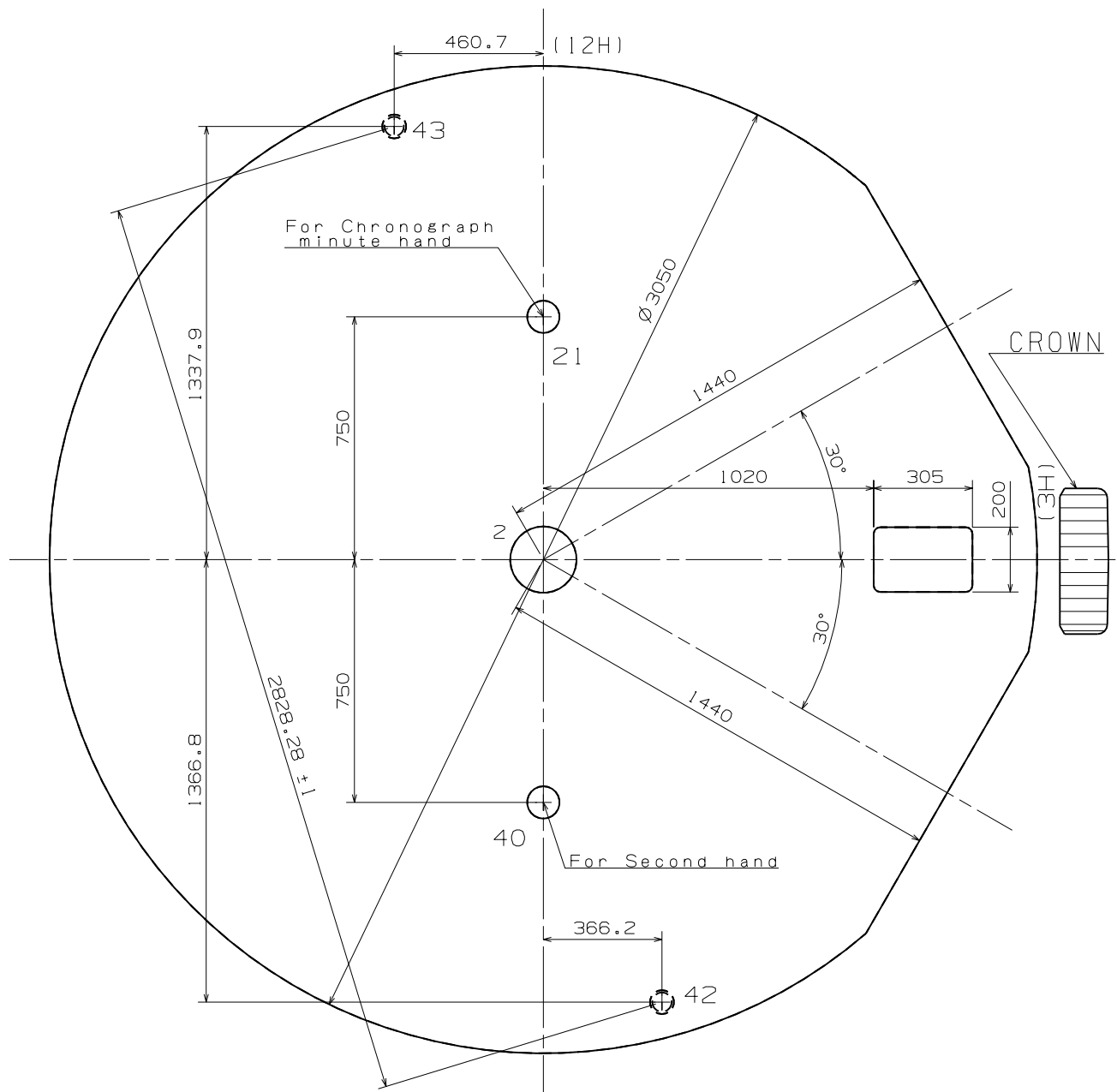


	Part. No.	A	B	C
TYPE A	0351 1770	1401	1999	40MAX

Scale : 20/1

Unit : 1=1/100mm

Version : 1

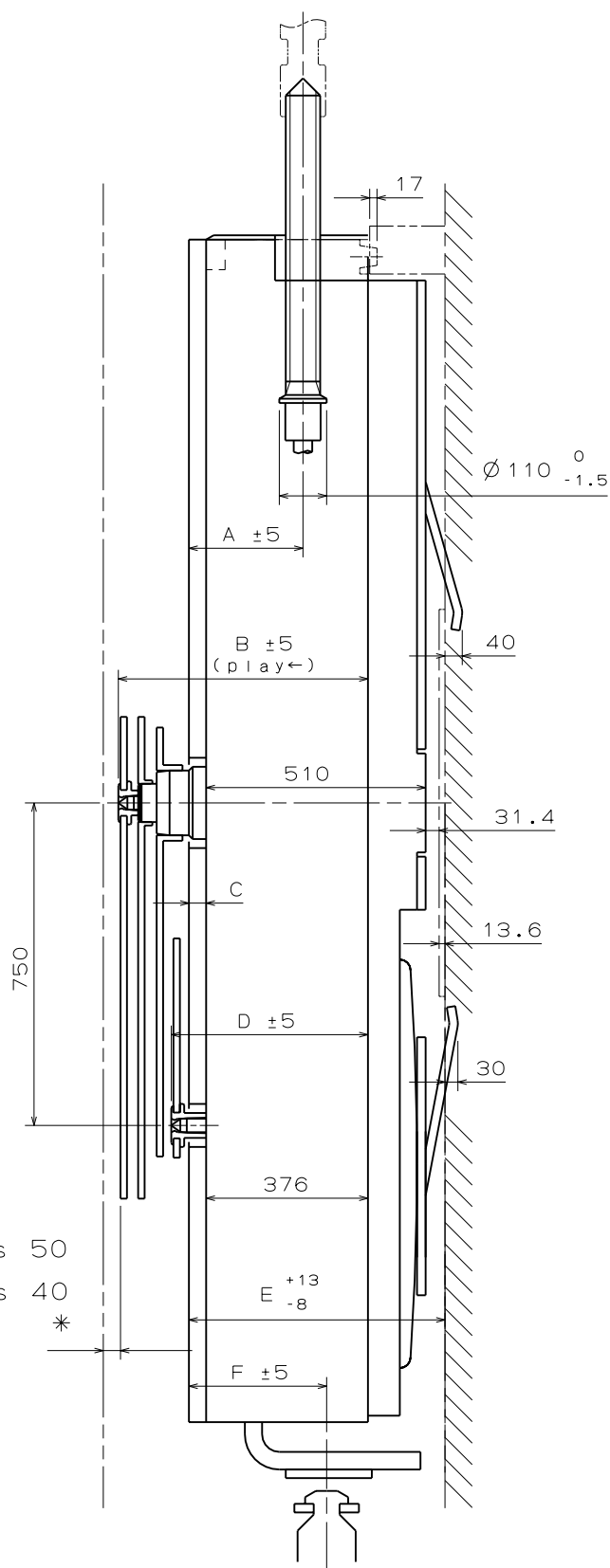


The tolerance of 2# hole position should be under 5 (Standard is 42#-43#)

Scale : 5/1

Unit : 1 = 1/100mm

Version: 1



*Acrylic Glass 50

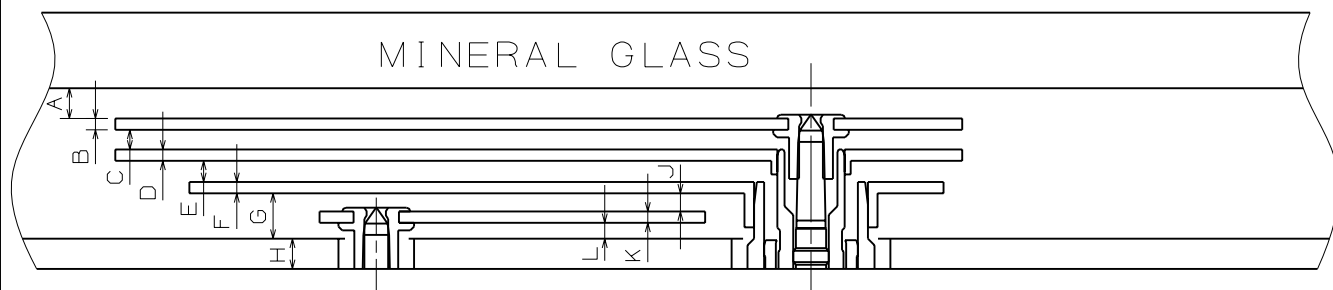
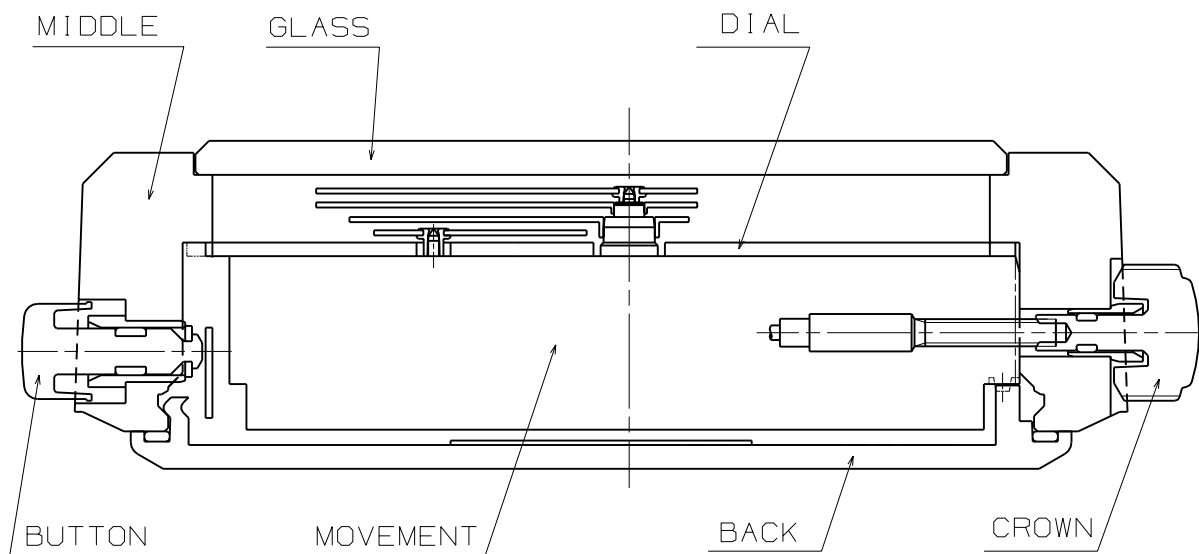
*Mineral Glass 40

*

	TYPE L
A	265
B	611
C	40
D	457
E	595
F	320

Scale : $\neq$
Unit : 1=1/100mm

Version : 1

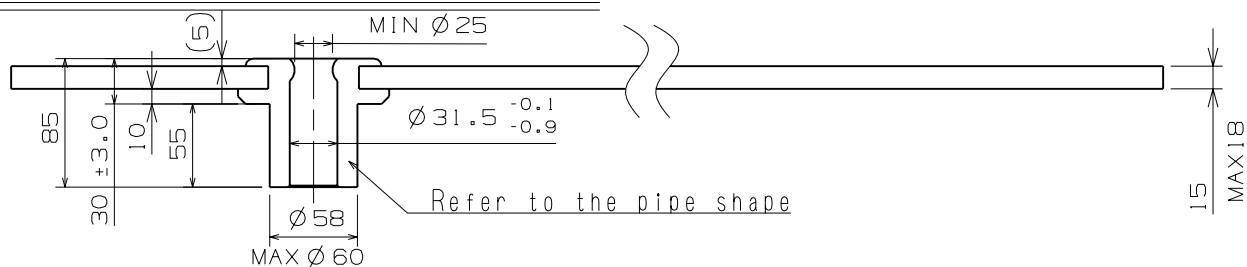


	TYPE L
A	40
B	15
C	30
D	15
E	35
F	15
G	80
H	40
J	44
K	15
L	21

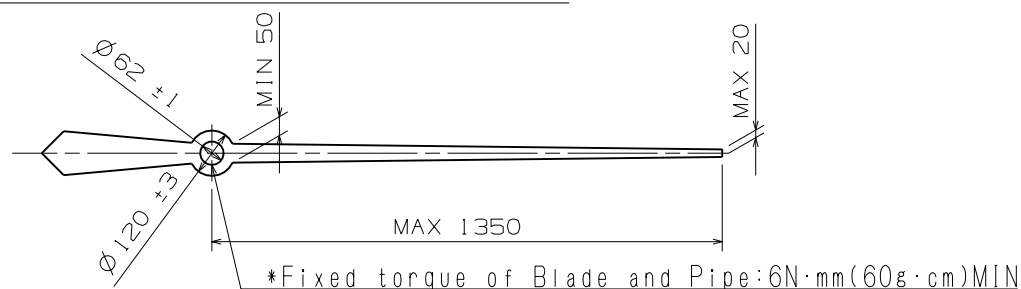
Scale : $\neq$
Unit : 1=1/100mm

Version : 1

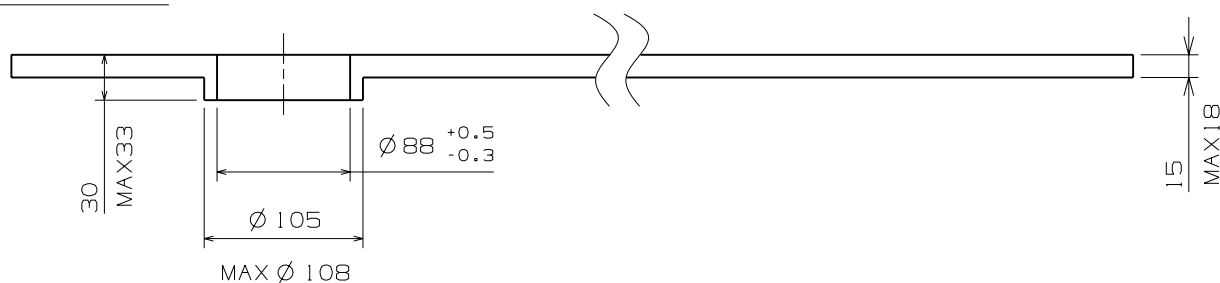
CHRONOGRAPH 1/5SECOND



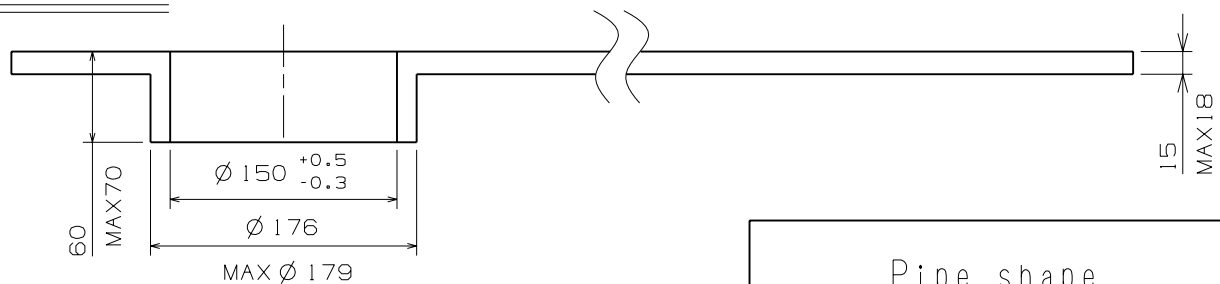
Recommended shape (Straight hand) SCALE: 5/1



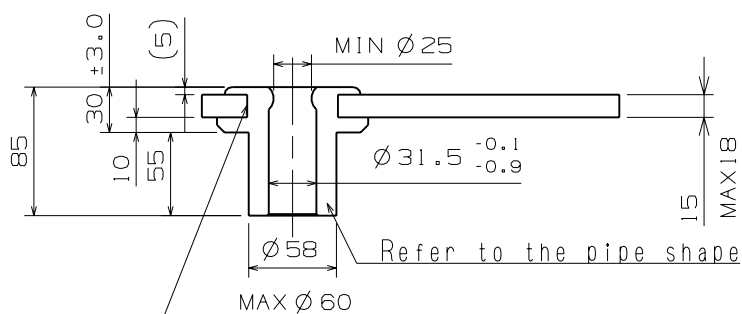
MINUTE



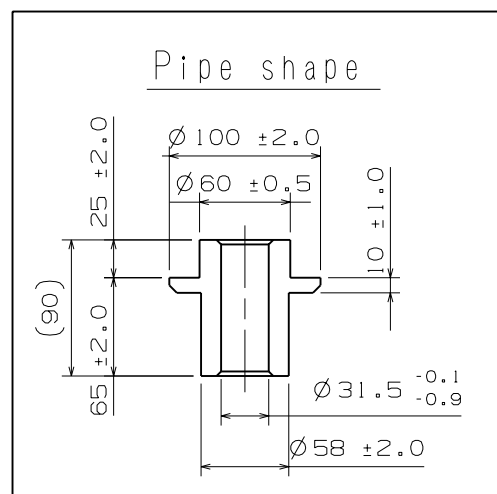
hour



SECOND CHRONOGRAPH MINUTE



*Fixed torque of Blade and Pipe: 6N·mm (60g·cm) MIN



Material : Bs
Scale : 20/1
Unit : 1 = 1/100mm

Version : 1