

Cal. VK64A

ϕ 30.80 mm

H 5.10 mm

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

MOVEMENT SPECIFICATION - 1

CAL. VK64A 13 1/2 Ligne Quartz Movement

Two Hands with 1/5 Center Chronograph Second (maximum count for 60 minutes per cycle),
Small Chronograph Minute, Small 24 Hours Indicator, 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
- 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)	-----
24 hours	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

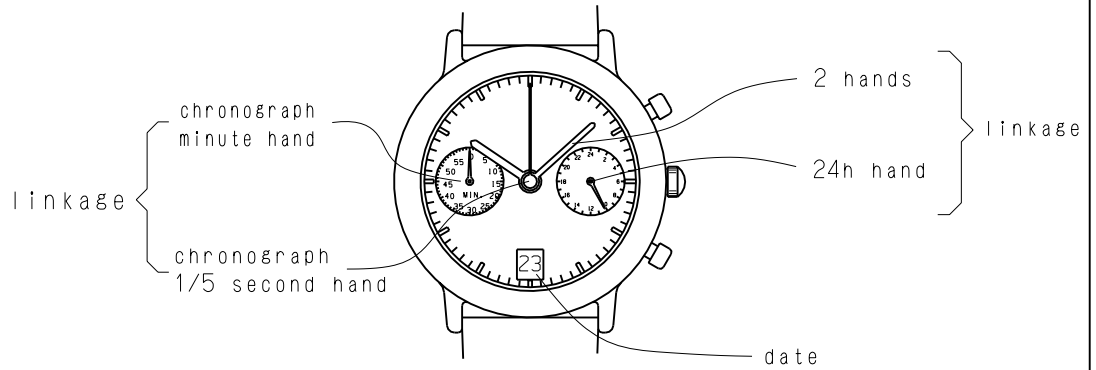
*** All specifications are subject to change without notice.**

Movement Specification-2

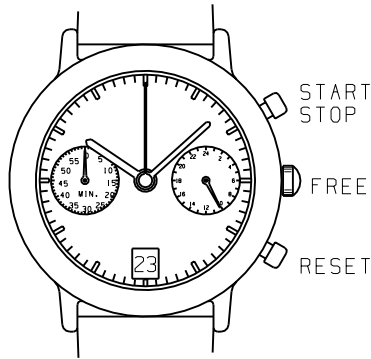
CAL. VK64A

OPERATION

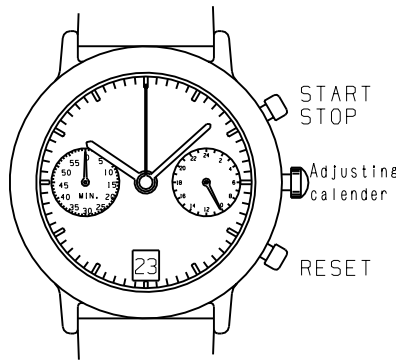
2 step motors
(2 hands with calendar, 1/5sec.chrono.maximum 60 minutes)



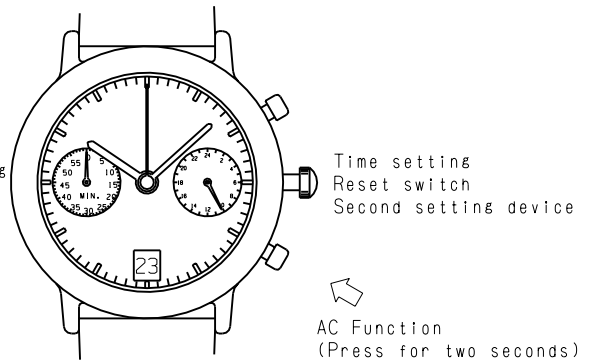
Normal Position



1st click
adjusting calendar
(clockwise)



2nd click
adjusting time

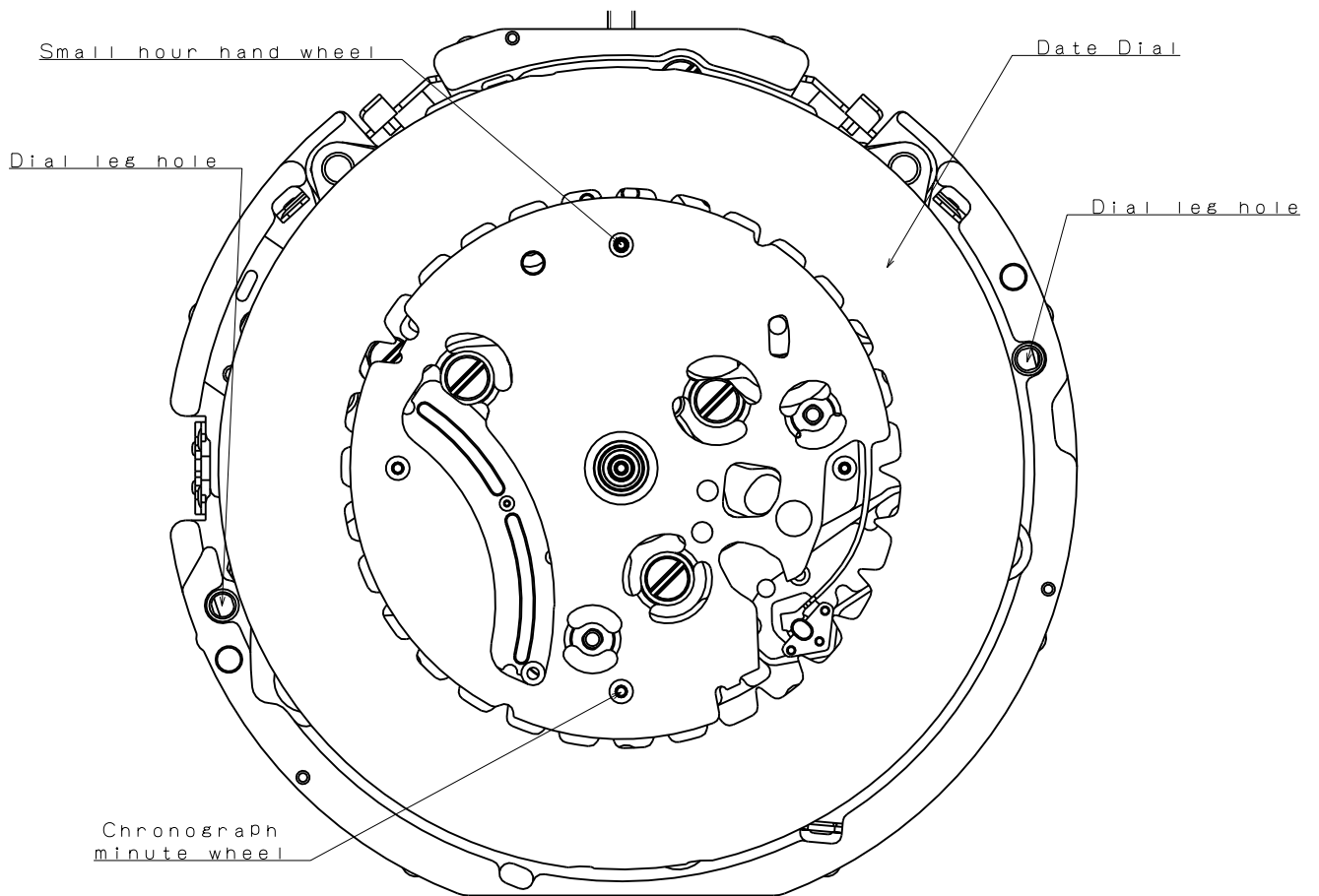
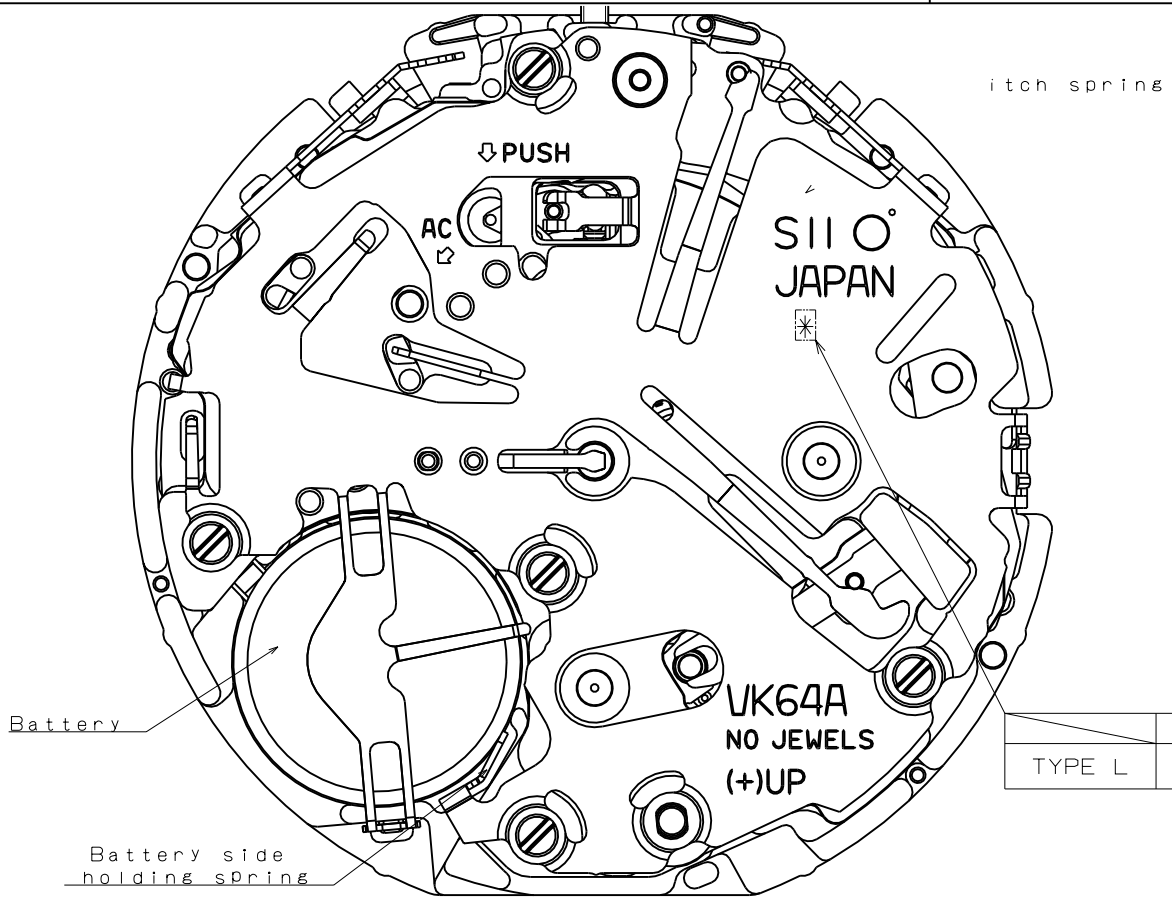


*If the chronograph hand positions are incorrect, pushing the RESET button will return the hands to their appropriate positions.

Version : 1

Appearance

Cal.



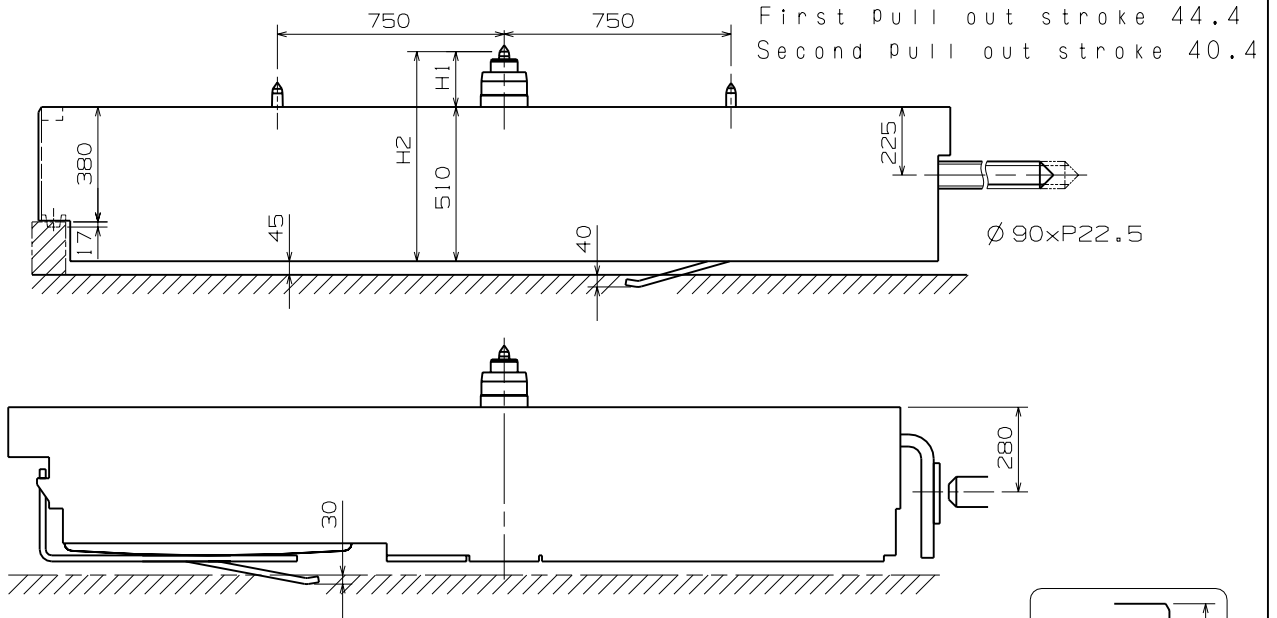
Sr

Unit : 1=1/100mm

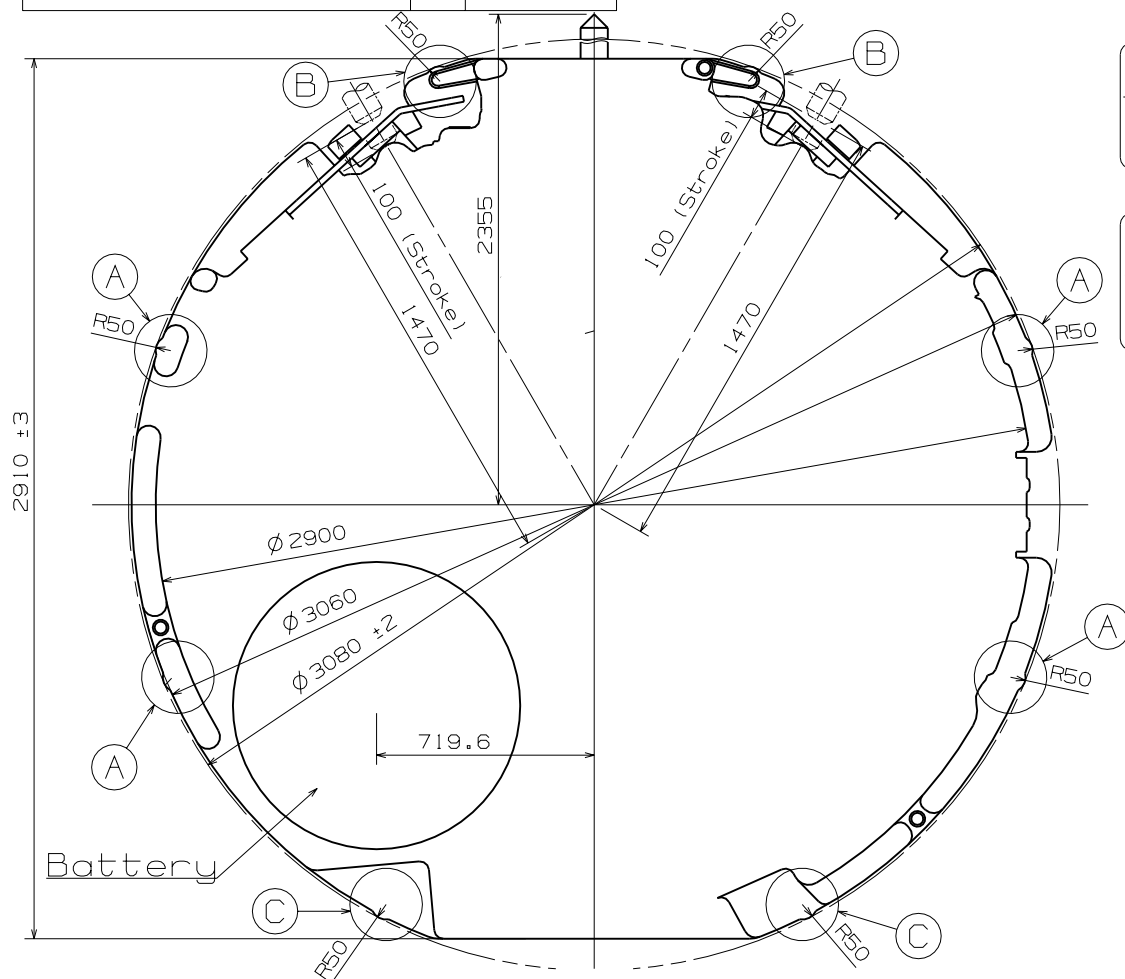
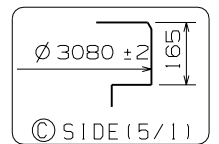
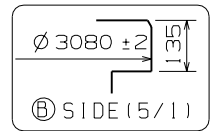
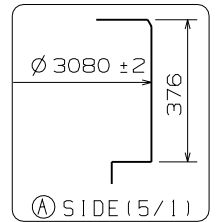
Version:2

Casing

1.



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

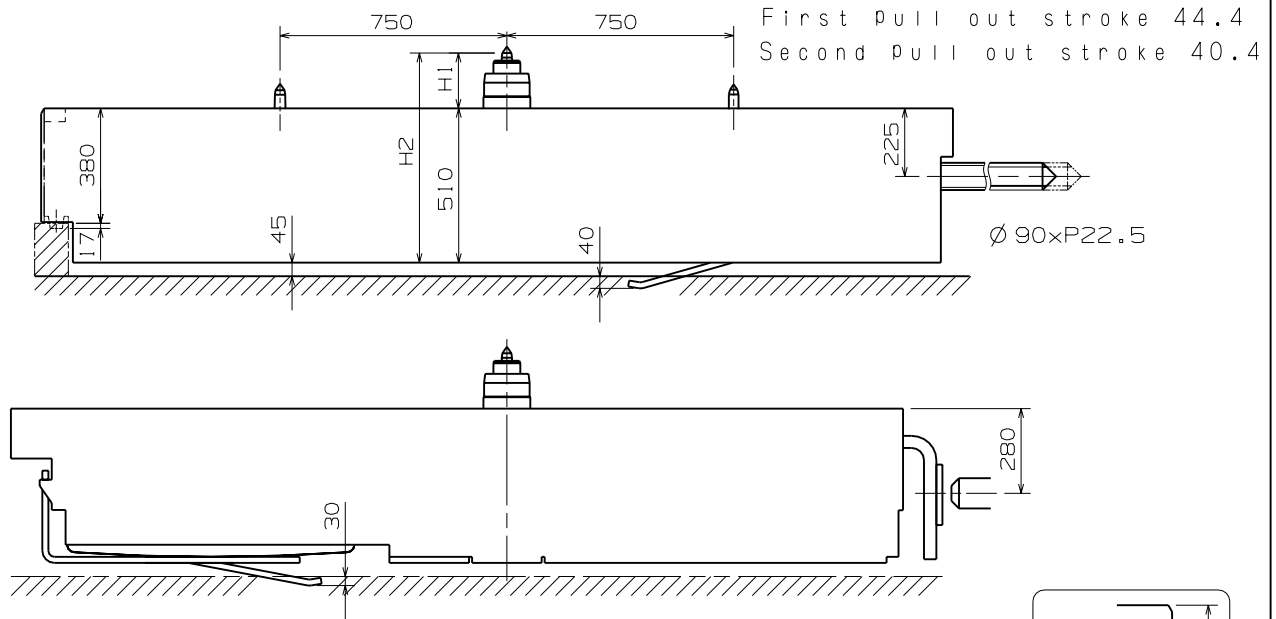


Scale -
Unit : 1=1/10

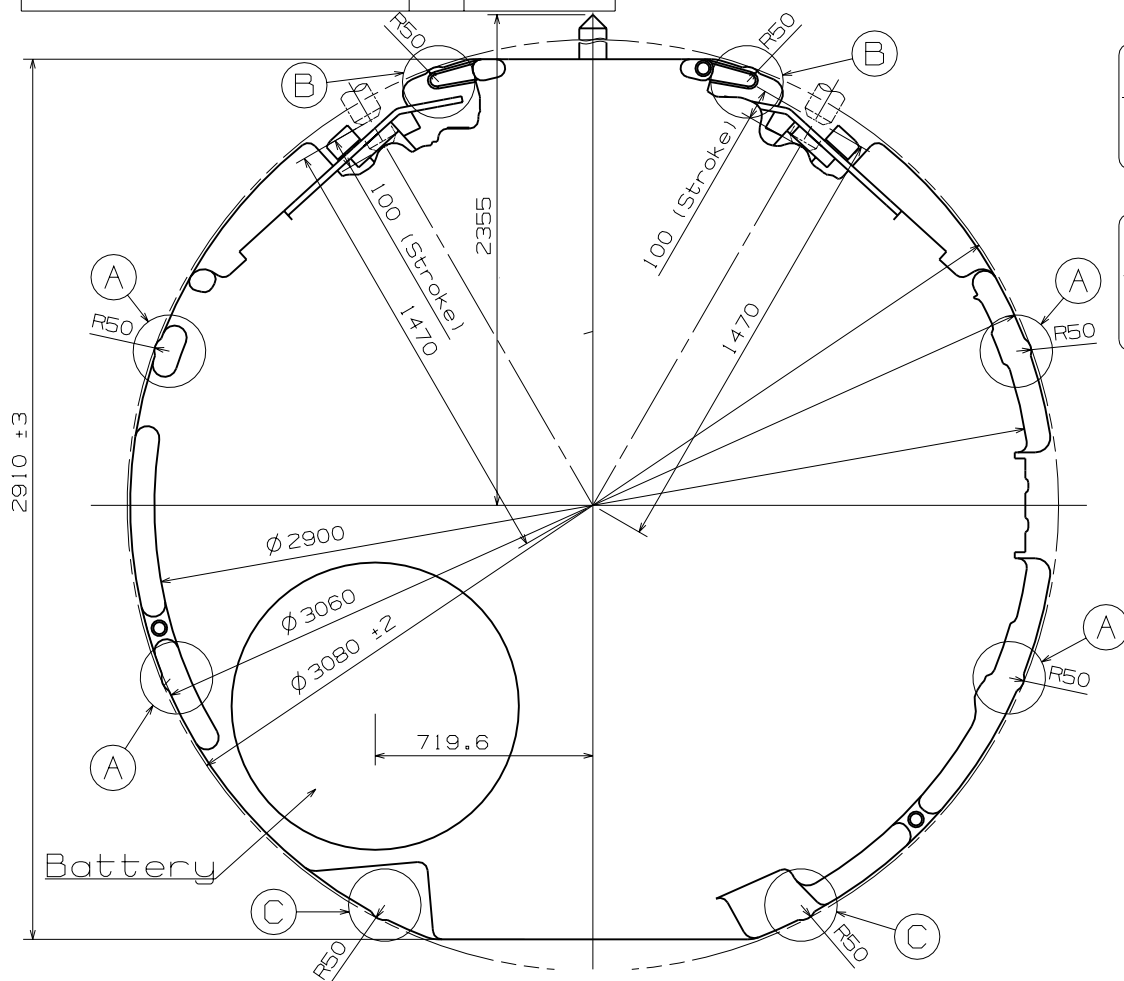
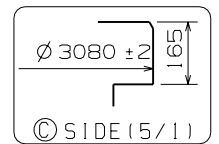
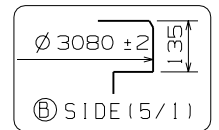
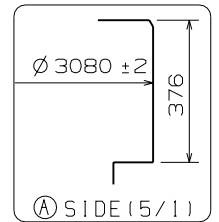
Version : 2

Casing

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 -
 Unit : 1=1/10

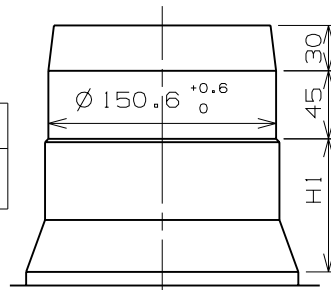
Version : 2

Hand Fitting

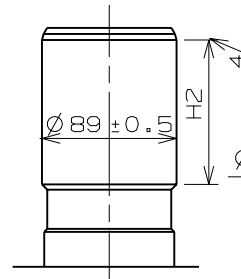
Cal.

- *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)
- *Small hour 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)

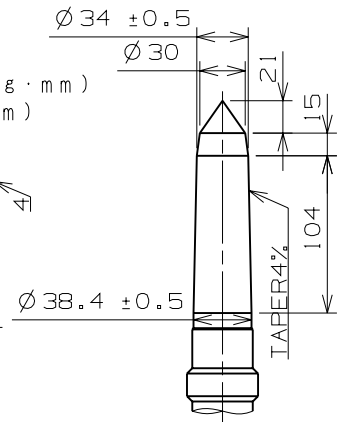
	H1	H2	H3
TYPE L	108	122.5	80



Hour wheel

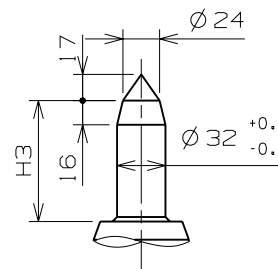


Center wheel

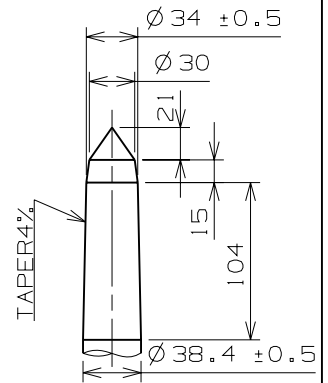


Chronograph 1/5 second wheel

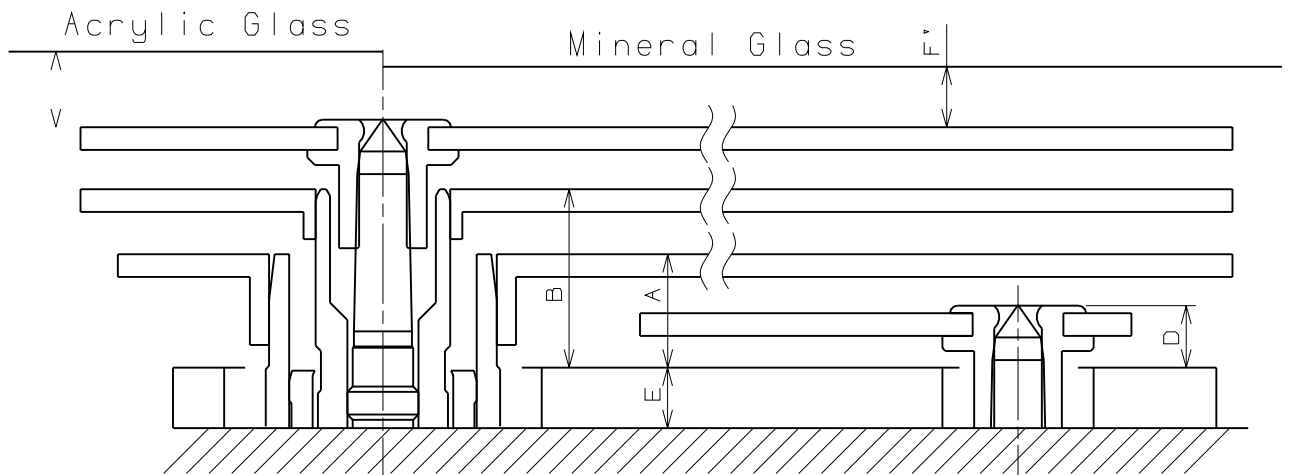
Parts name	Parts No.
	TYPE L
Hour wheel	0273 0410
Center wheel	0221 0910
Small hour hand wheel	0157 0120
Chronograph minute wheel	0902 0170
Chronograph 1/5 second wheel	0888 0270



Small hour hand wheel



Chronograph minute wheel



	A	B	C	E		
TYPE L	95	145	190	41	40	50

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

Scale 20/1

1=1/100mm

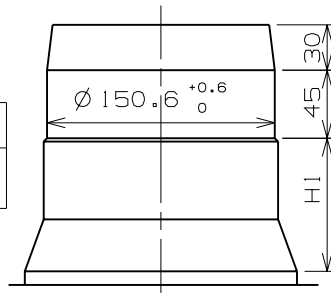
Version: 2

Hand Fitting

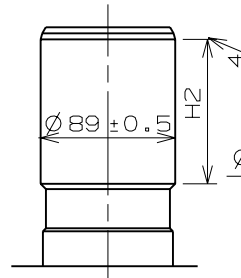
Cal.

- *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)
- *Small hour 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)

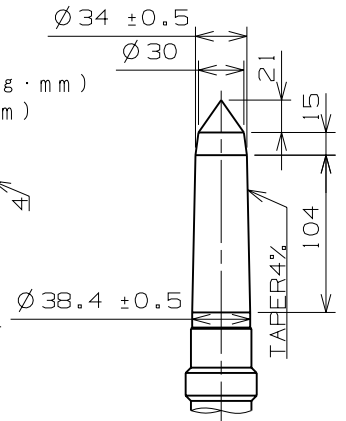
	H1	H2	H3
Type L 高針	108	122.5	80



Hour wheel

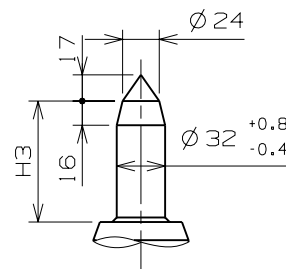


Center wheel

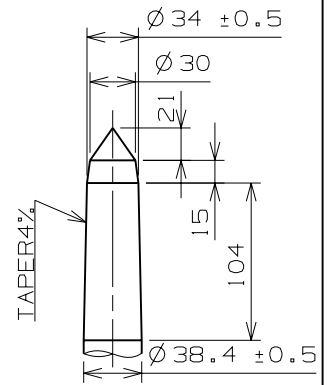


Chronograph
1/5second wheel

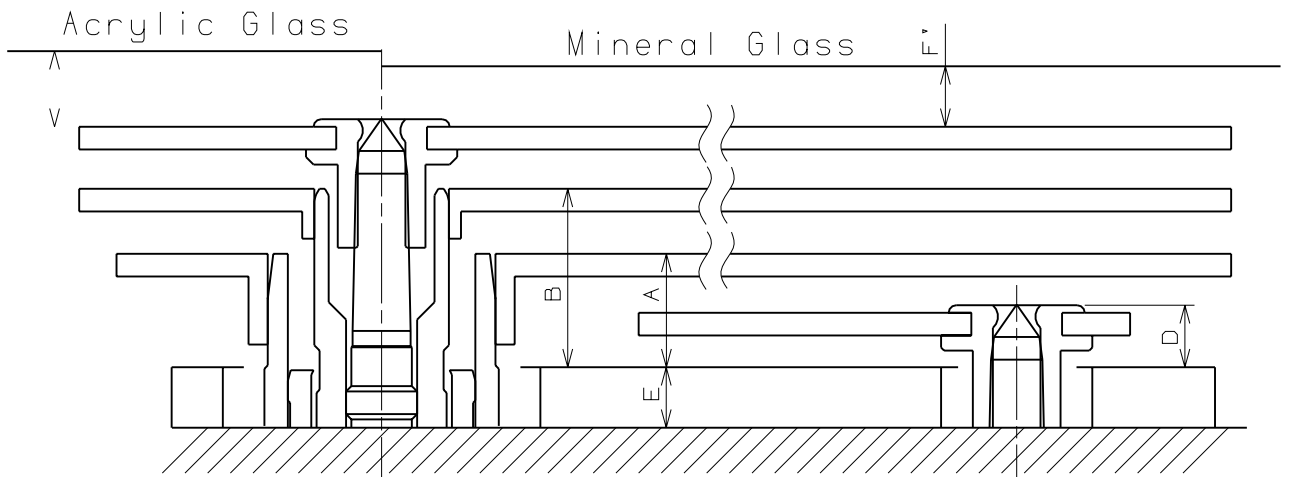
Parts name	Parts No.
	Type L 高針
Hour wheel 時針輪	0273 0410
Center wheel 分針輪	0221 0910
Small hour hand wheel 小時針輪	0157 0120
Chronograph minute wheel 計時分針輪	0902 0170
Chronograph 1/5 sec. wheel 1/5計時秒針輪	0888 0270



Small hour
hand wheel



Chronograph
minute wheel



	A	B	C	E		
Type L 高針	95	145	190	41	40	50 40

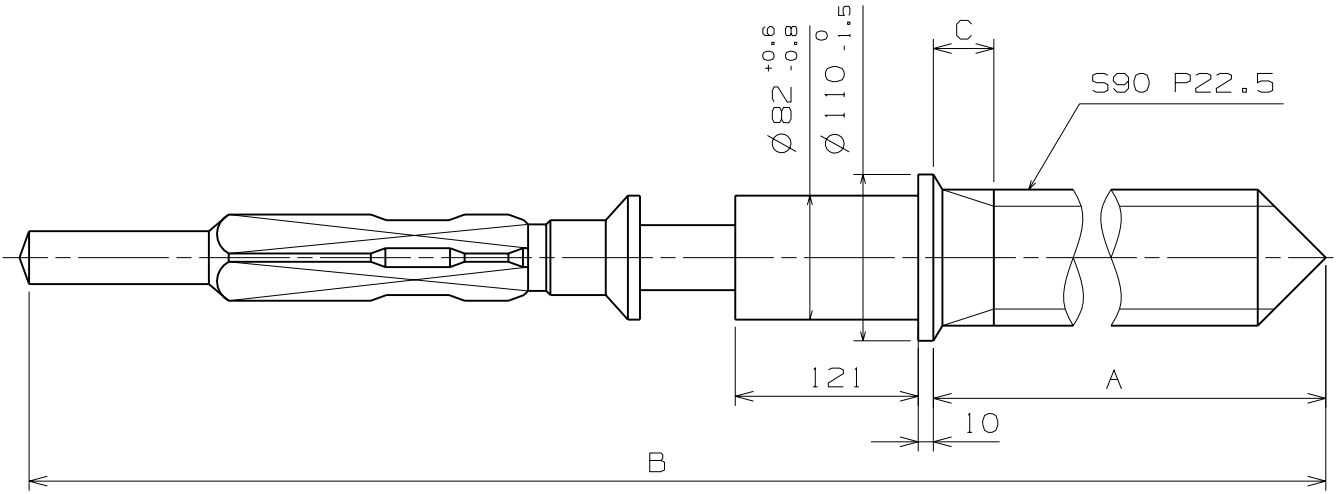
*Do not reuse the chronograph hands once detached.
Please change and use new hands.

Scale 20/1
1 = 1/100mm

Version: 2

Hand Setting Stem

Cal.



No.

0351 1770 1371 1969

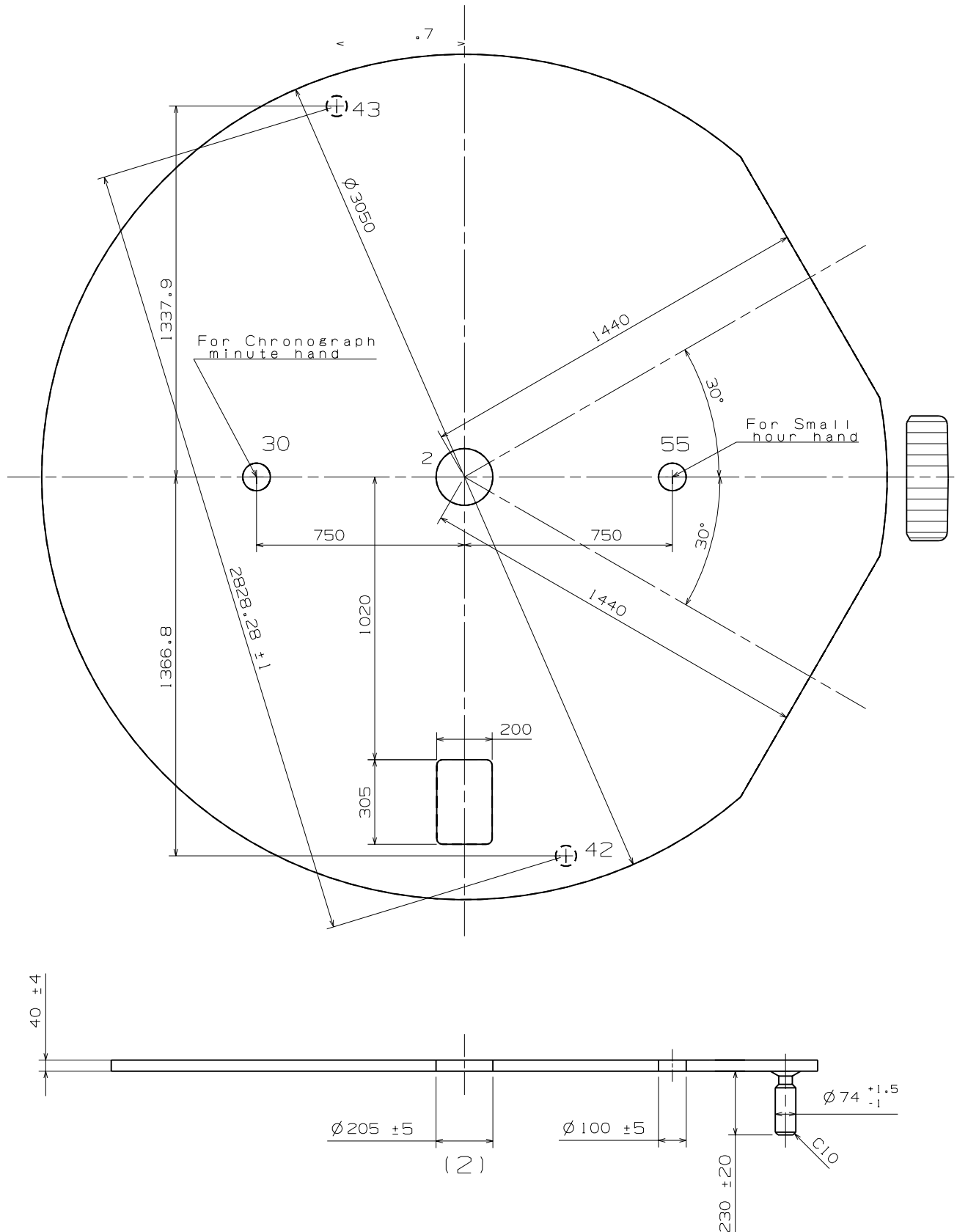
Scale : 20/

Unit : 1=1/100mm

Version : 2

Dial

Cal. VK64A



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

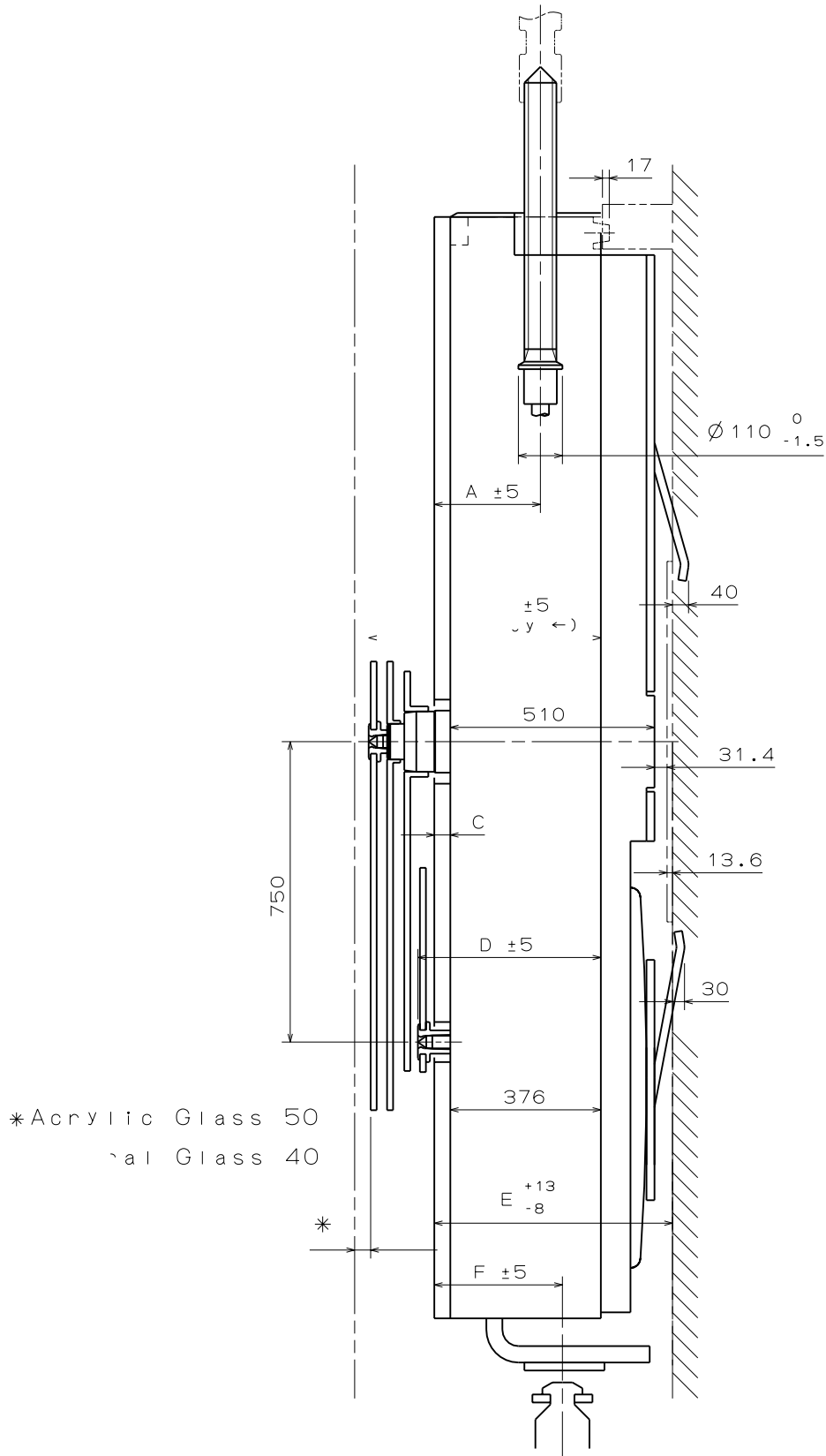
Scale 5/1

Unit : 1=1/100mm

Version: 1

Assembly Plan-1

Cal. VK64A

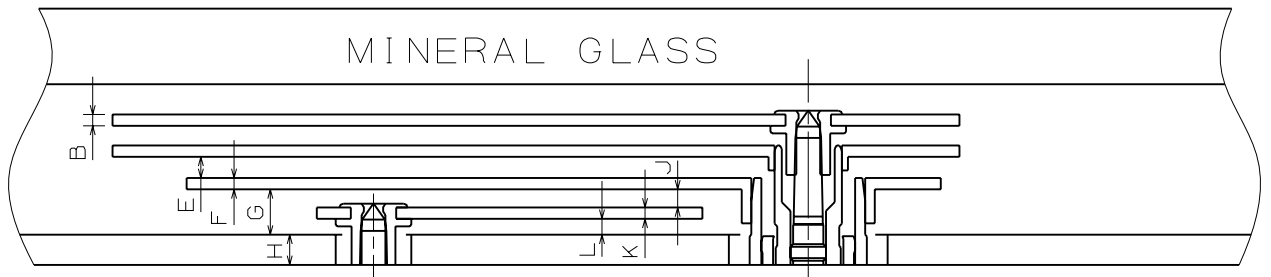
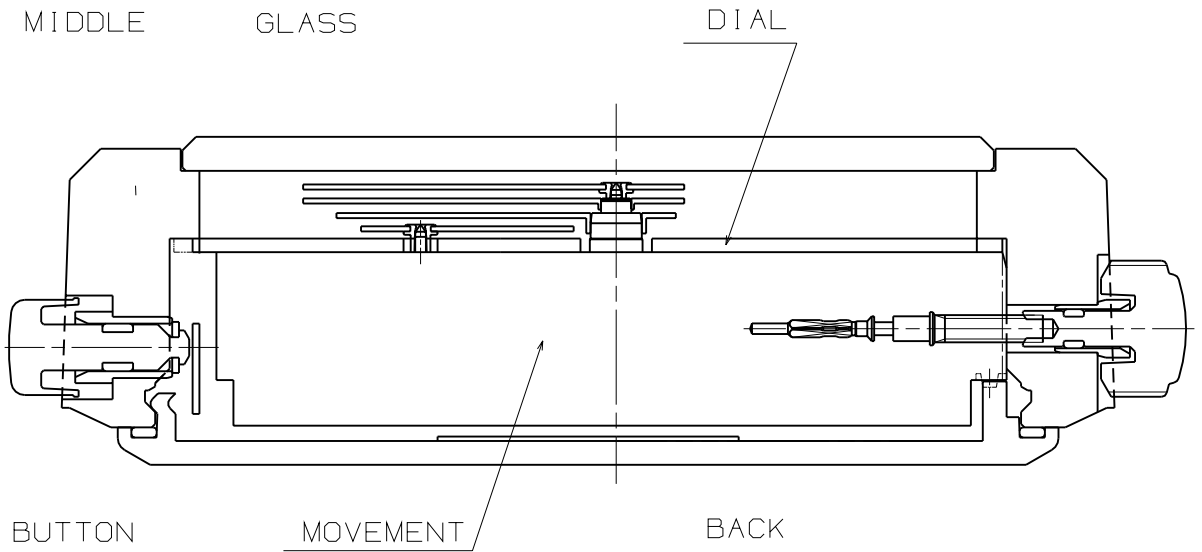


Scale: \neq
 Unit: 1=1/100mm

Version: 2

Assembly Plan - 2

Cal. VK64A



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

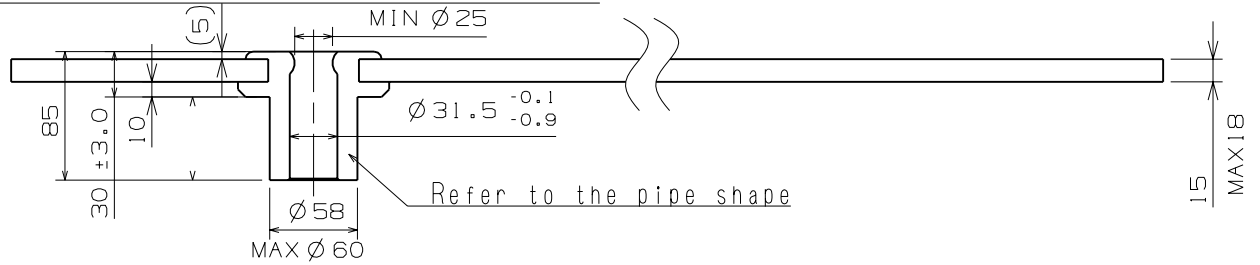
S ~ ≠
Unit : 1=1/100mm

Version : 2

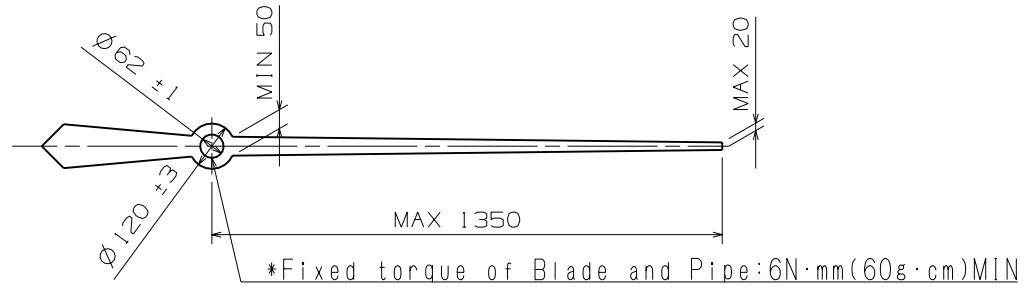
Hands

Cal. VK64A

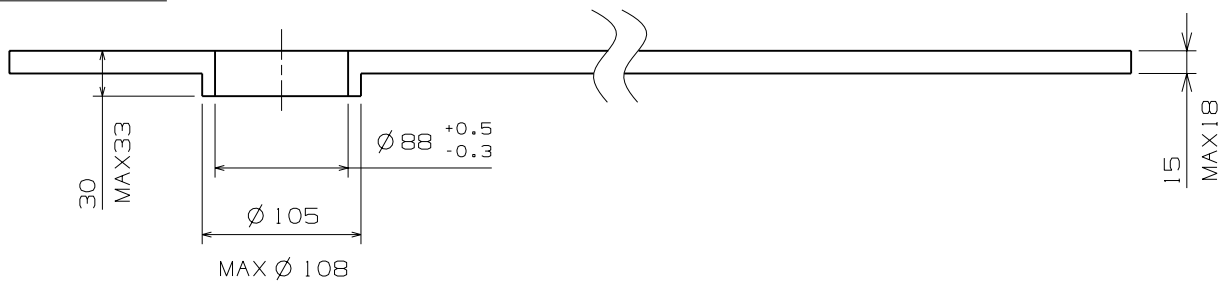
CHRONOGRAPH 1/5SECOND



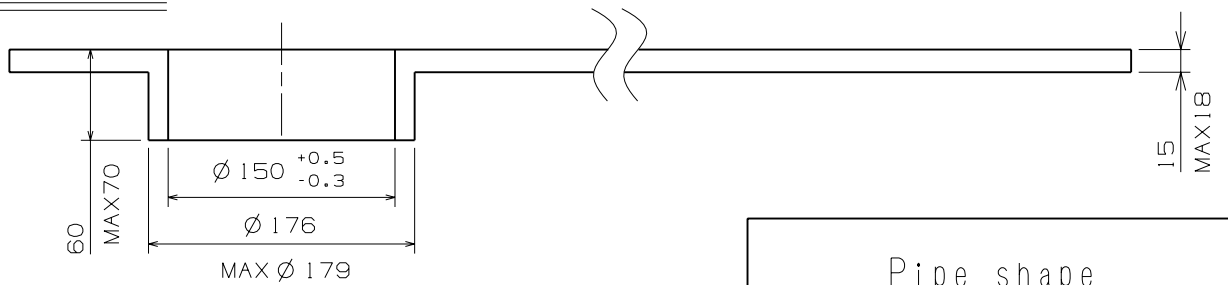
Recommended shape (Straight hand) SCALE: 5/1



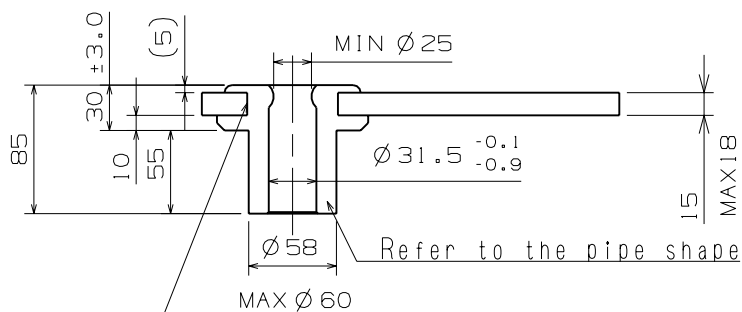
MINUTE



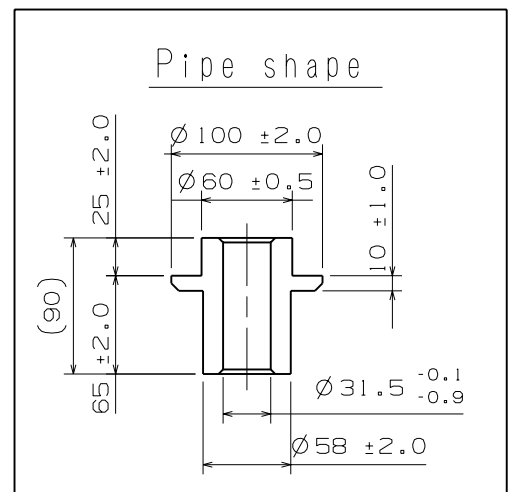
HOUR



SMALL HOUR CHRONOGRAPH MINUTE



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



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

Version : 1