

Cal. VK63A

ϕ 30.80 mm

H 5.10 mm

| Item | Version No. |
|-------------------|-------------|
| Specification - 1 | Version 2 |
| Specification - 2 | Version 1 |
| Appearance | Version 5 |
| Casing | Version 4 |
| Hand Fitting | Version 4 |
| Hand Setting Stem | Version 2 |
| Dial - 1 | Version 2 |
| Dial - 2 | Version 2 |
| Assembly Plan - 1 | Version 4 |
| Assembly Plan - 2 | Version 4 |
| Hands | Version 1 |
| | |
| | |
| | |



MOVEMENT SPECIFICATION - 1

CAL. VK63A 13 1/2 Ligne Quartz Movement

Two Hands with 1/5 Center Chronograph Second,
Small Second, 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) | ----- |
| Small sec. / 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

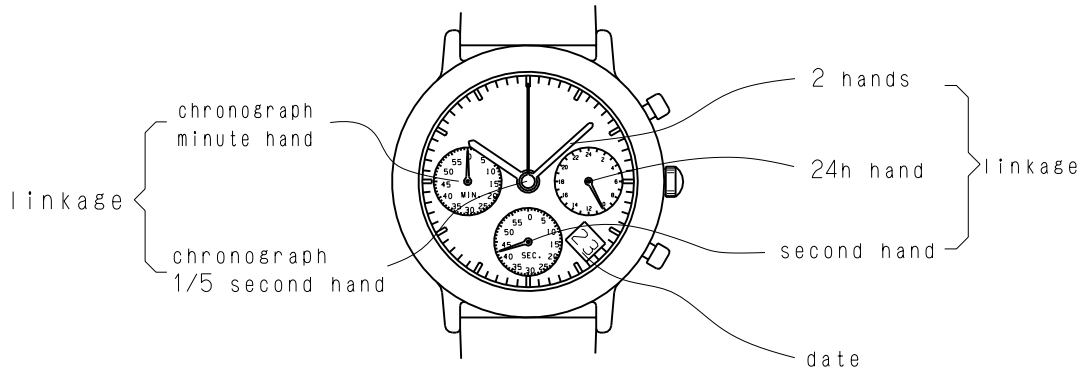
*** All specifications are subject to change without notice.**

Movement Specification-2

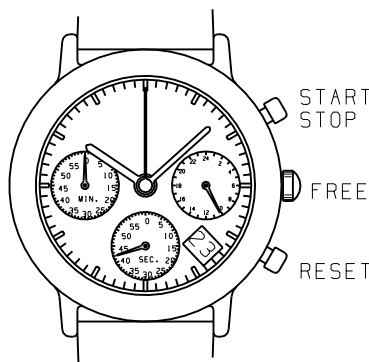
CAL. VK63A

OPERATION

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

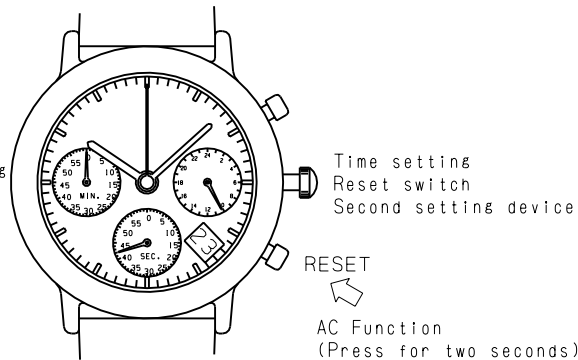
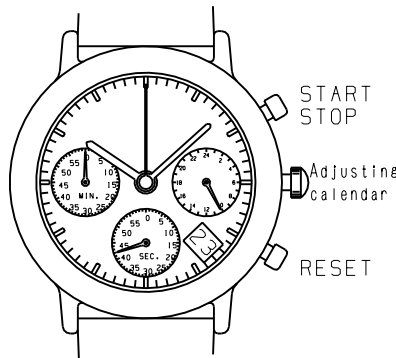


Normal Position



1st click
adjusting calendar
(clockwise)

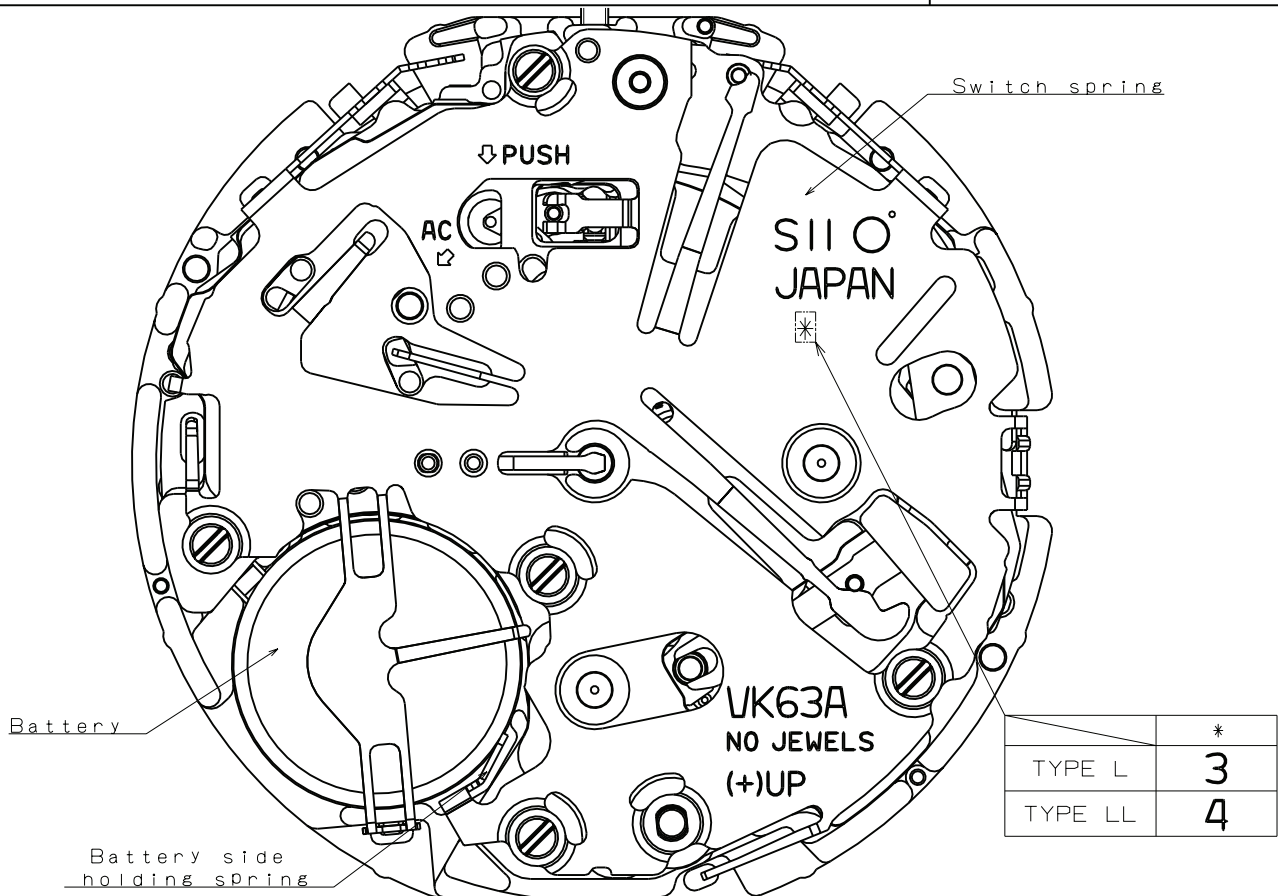
2nd click
adjusting time



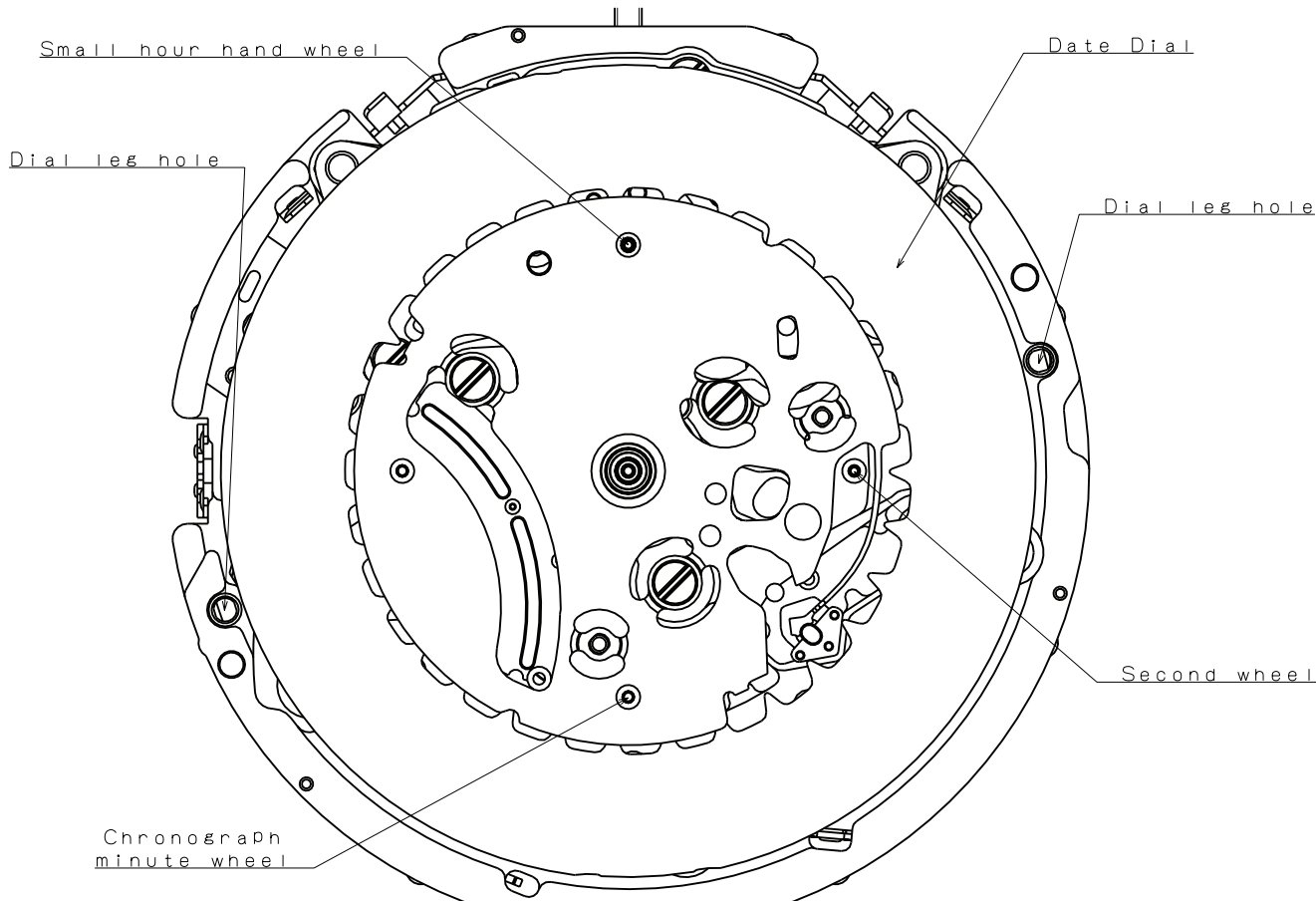
*After AC and the crown is returned to normal position, the second hand will move at two-second interval for 10 seconds.

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

Version : 1



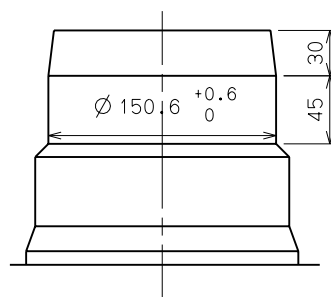
| | |
|---------|---|
| | * |
| TYPE L | 3 |
| TYPE LL | 4 |



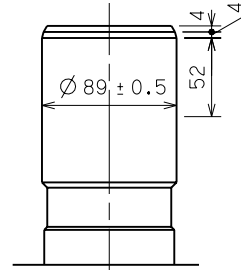
Scale : 4/1
Unit : 1=1/100mm

Version : 5

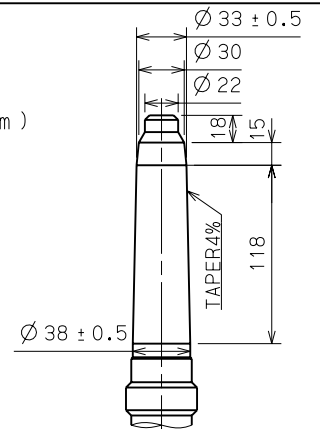
- *Hour hand unbalance $\leq 0.5\mu\text{N}\cdot\text{m}$ (50mg·mm)
- *Minute hand unbalance $\leq 0.6\mu\text{N}\cdot\text{m}$ (60mg·mm)
- *Second hand unbalance $\leq 0.05\mu\text{N}\cdot\text{m}$ (5mg·mm)
- *Small hour hand unbalance $\leq 0.05\mu\text{N}\cdot\text{m}$ (5mg·mm)
- *Chronograph 1/5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



Hour wheel

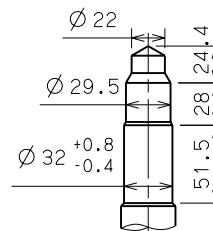


Center wheel

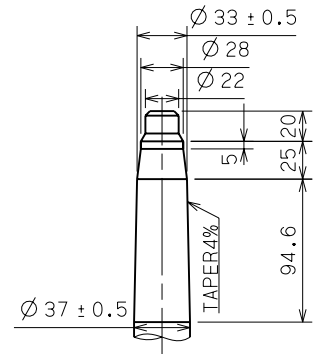


Chronograph 1/5 second wheel

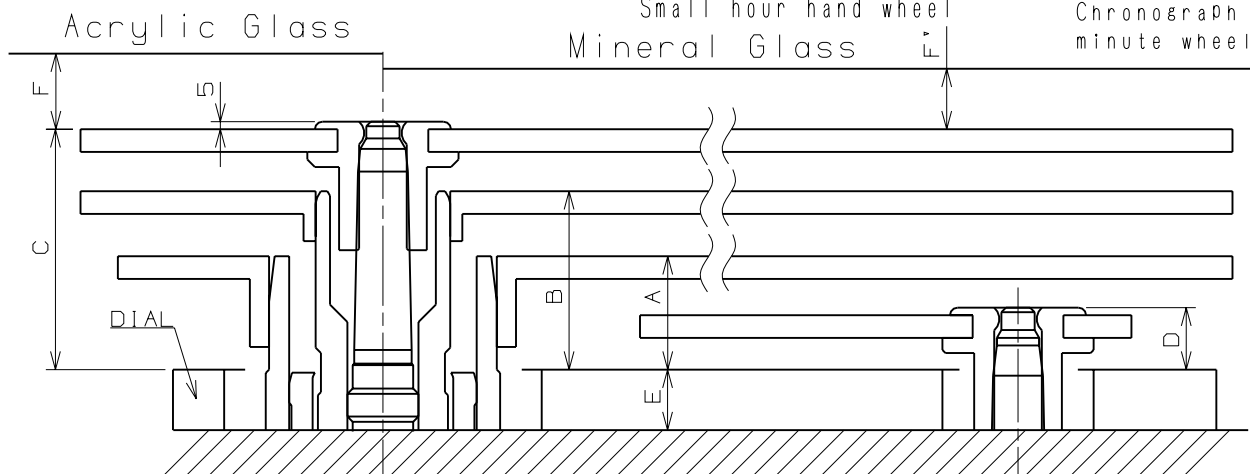
| Parts name | Parts No. | |
|------------------------------|-----------|-----------|
| | TYPE L | TYPE LL |
| Hour wheel | 0273 0410 | 0273 0420 |
| Center wheel | 0221 0910 | 0221 0920 |
| Second wheel | 0240 0180 | 0240 0190 |
| Small hour hand wheel | 0157 0120 | 0157 0130 |
| Chronograph minute wheel | 0740 0020 | 0740 0030 |
| Chronograph 1/5 second wheel | 0888 0180 | 0888 0190 |



Second wheel



Chronograph minute wheel



| | A | B | C | D | E | F | F' |
|---------|----|-----|-----|----|----|----|----|
| TYPE L | 95 | 145 | 190 | 41 | 40 | 50 | 40 |
| TYPE LL | 95 | 145 | 190 | 45 | 85 | 50 | 40 |

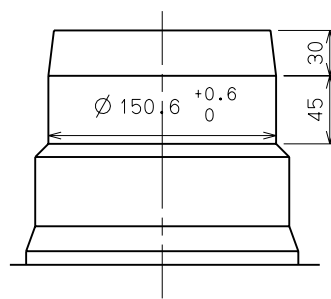
***Do not reuse the chronograph hands once detached. Please change and use new hands.**

Scale : 20/1

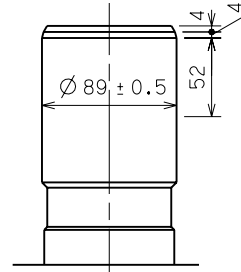
Unit : 1=1/100mm

Version : 4

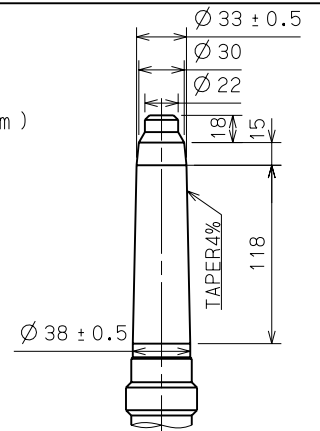
- *Hour hand unbalance $\leq 0.5\mu\text{N}\cdot\text{m}$ (50mg·mm)
- *Minute hand unbalance $\leq 0.6\mu\text{N}\cdot\text{m}$ (60mg·mm)
- *Second hand unbalance $\leq 0.05\mu\text{N}\cdot\text{m}$ (5mg·mm)
- *Small hour hand unbalance $\leq 0.05\mu\text{N}\cdot\text{m}$ (5mg·mm)
- *Chronograph 1/5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



Hour wheel

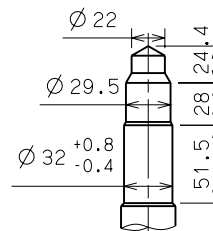


Center wheel

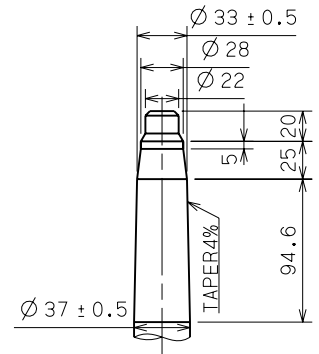


Chronograph 1/5 second wheel

| Parts name | Parts No. | |
|-------------------------------------|-----------|-------------|
| | Type L 高針 | Type LL 特高針 |
| Hour wheel 時針輪 | 0273 0410 | 0273 0420 |
| Center wheel 分針輪 | 0221 0910 | 0221 0920 |
| Second wheel 秒針輪 | 0240 0180 | 0240 0190 |
| Small hour hand wheel 小時針輪 | 0157 0120 | 0157 0130 |
| Chronograph minute wheel 計時分針輪 | 0740 0020 | 0740 0030 |
| Chronograph 1/5 sec. wheel 1/5計時秒針輪 | 0888 0180 | 0888 0190 |

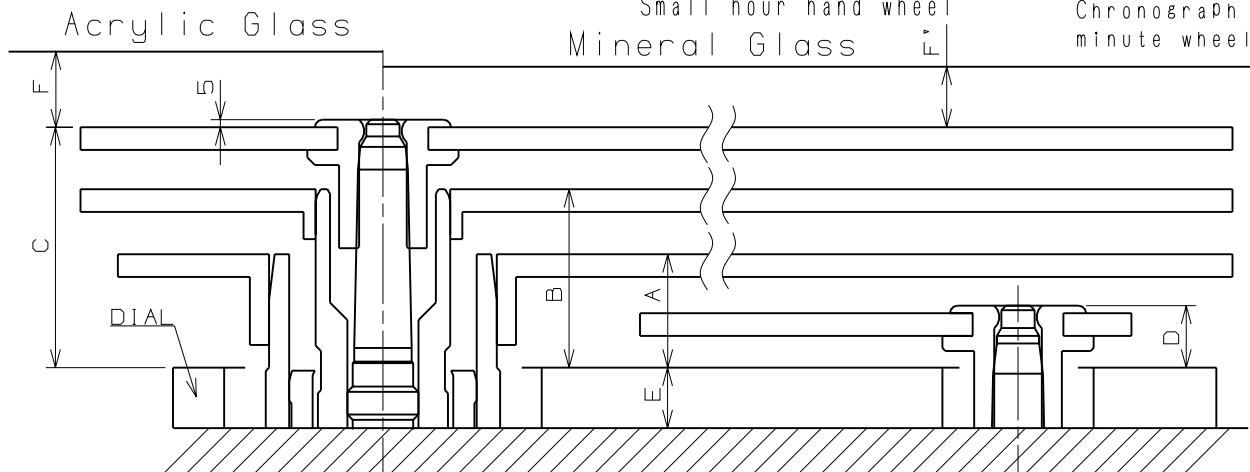


Second wheel



Small hour hand wheel

Chronograph minute wheel



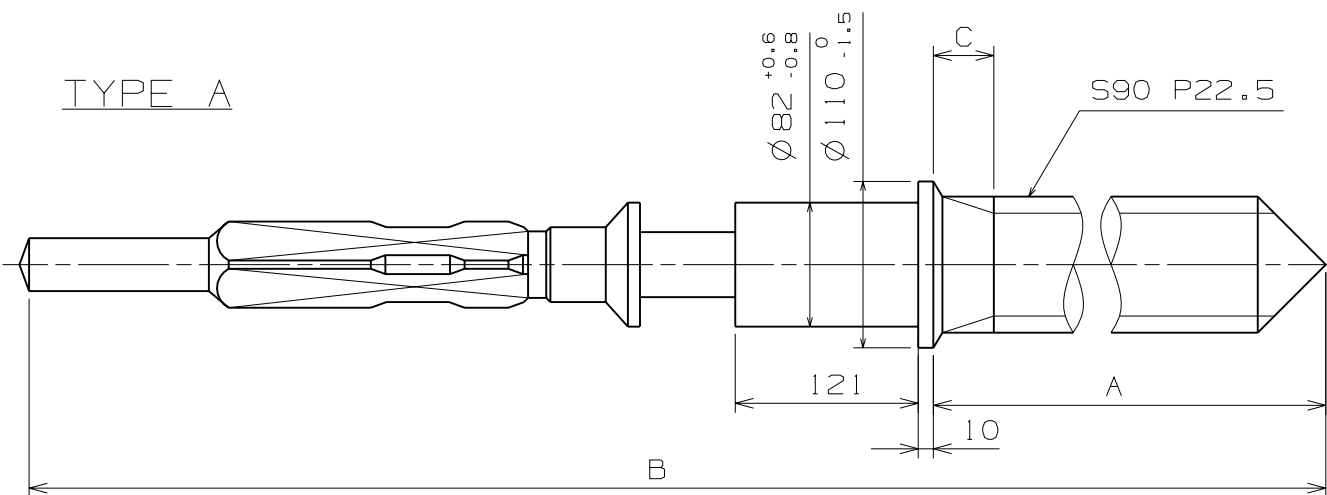
| | A | B | C | D | E | F | F' |
|-------------|----|-----|-----|----|----|----|----|
| Type L 高針 | 95 | 145 | 190 | 41 | 40 | 50 | 40 |
| Type LL 特高針 | 95 | 145 | 190 | 45 | 85 | 50 | 40 |

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

Scale : 20/1

Unit : 1=1/100mm

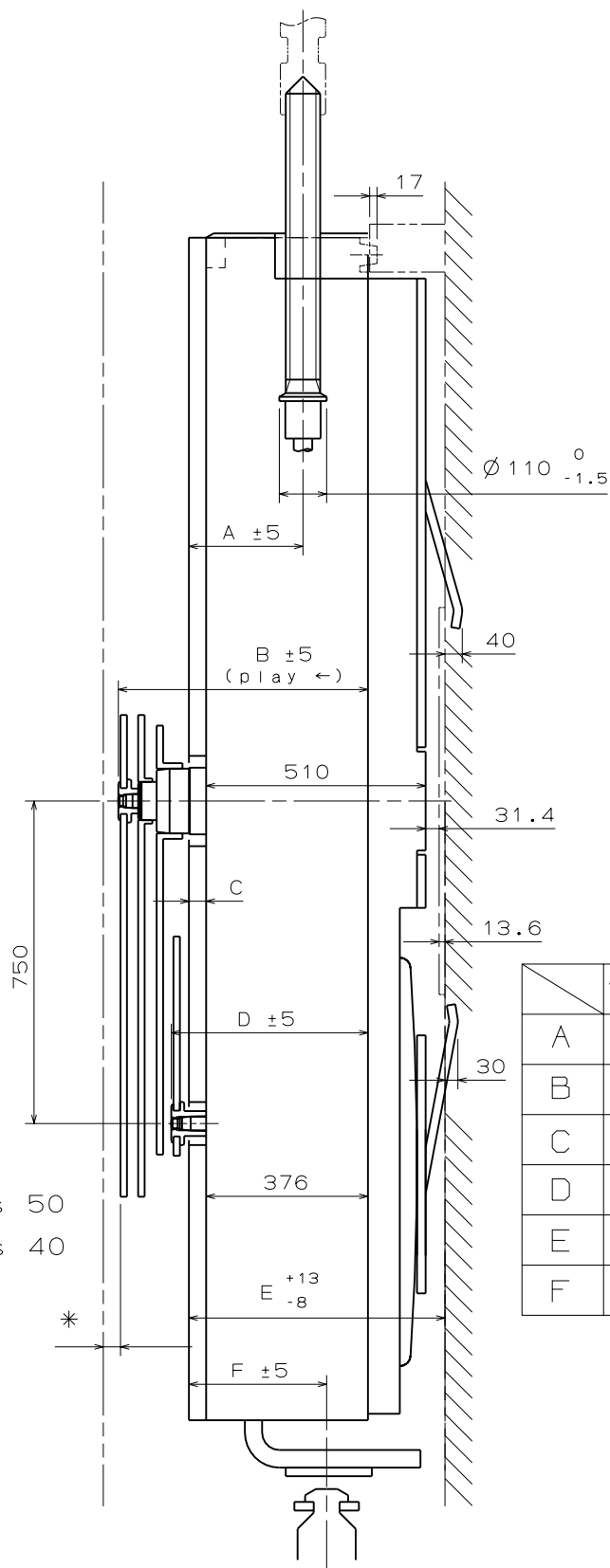
Version : 4



| | Part. No. | A | B | C |
|--------|-----------|------|------|-------|
| TYPE A | 0351 1770 | 1371 | 1969 | 40MAX |

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

Version : 2

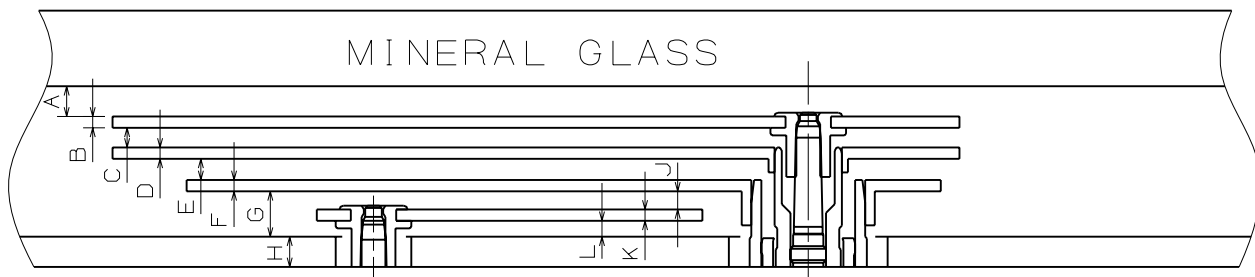
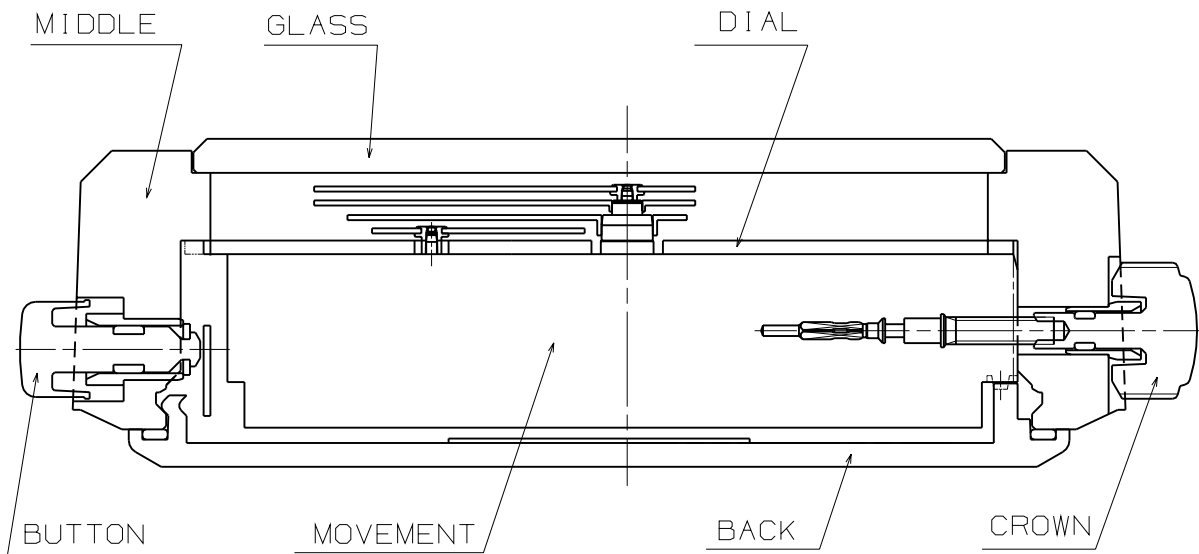


*Acrylic Glass 50
*Mineral Glass 40

*

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

Version : 4

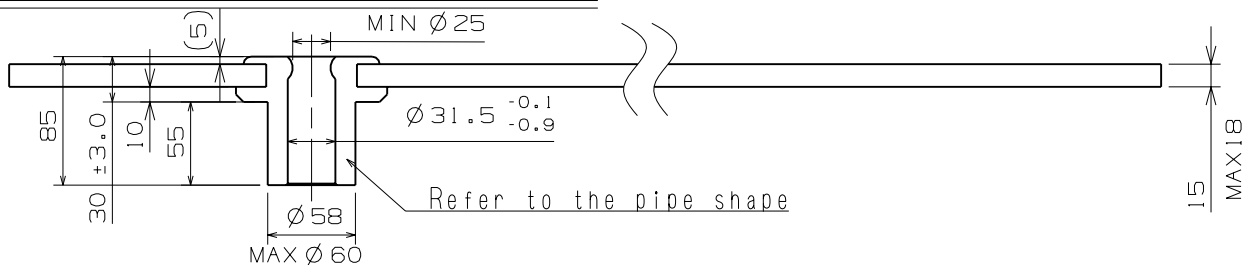


| | TYPE L | TYPE LL |
|---|--------|---------|
| A | 40 | 40 |
| B | 15 | 15 |
| C | 30 | 30 |
| D | 15 | 15 |
| E | 35 | 35 |
| F | 15 | 15 |
| G | 80 | 80 |
| H | 40 | 85 |
| J | 44 | 40 |
| K | 15 | 15 |
| L | 21 | 25 |

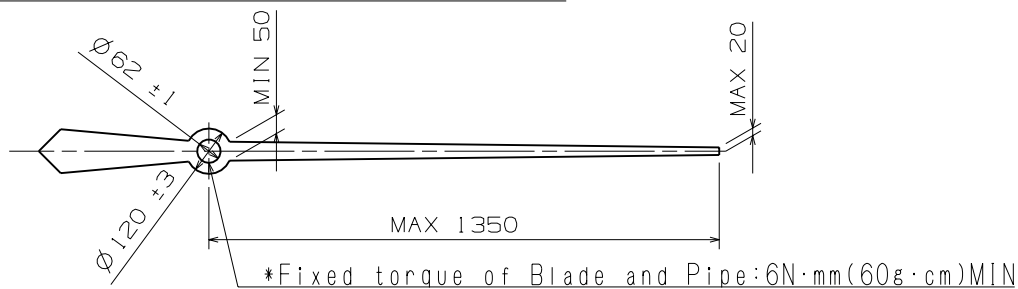
Scale : \neq
Unit : 1=1/100mm

Version : 4

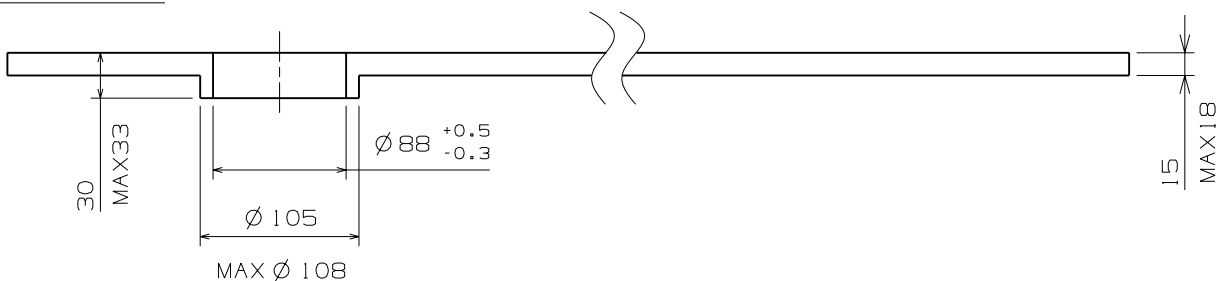
CHRONOGRAPH 1/5SECOND



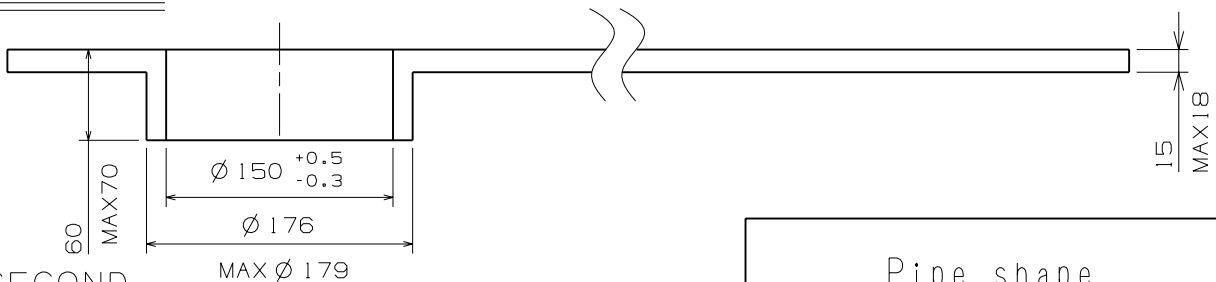
Recommended shape (Straight hand) SCALE: 5/1



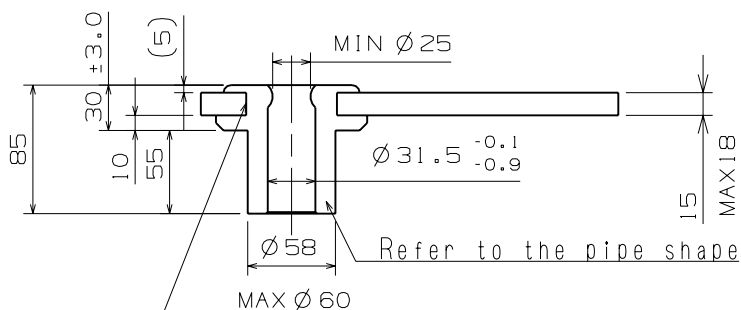
MINUTE



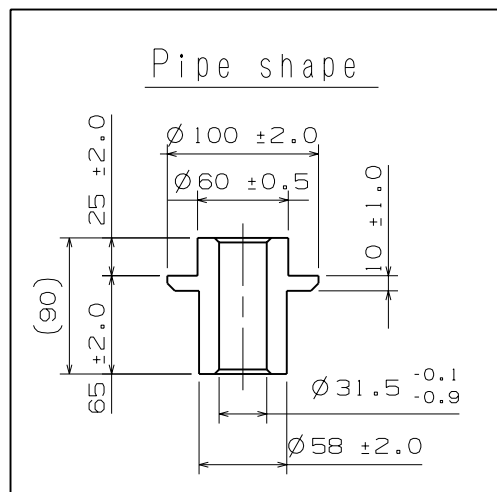
HOUR



SECOND
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