Watch Movement Specification and Drawing

## MULTI - FUNCTION

# Cal. VX7PE

| Movement Size |
| --- |

**12 3/4'''**

| Casing Diameter |
| --- |

**Ø 28.6mm**

| Height |
| --- |

**3.99mm**

| Battery Life |
| --- |

**3 years**
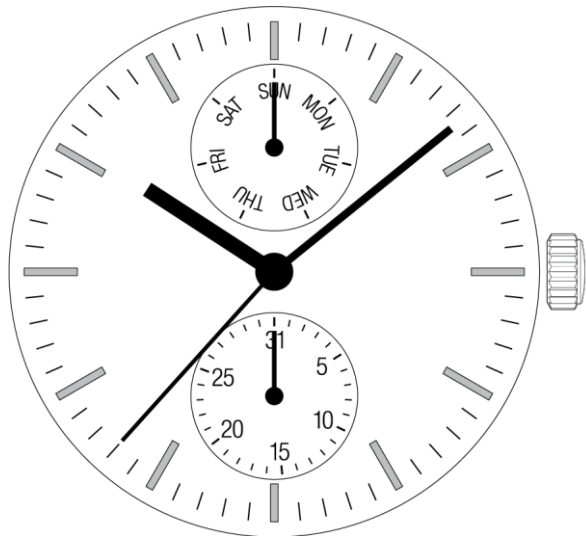
# Cal. VX7PE

| Cal. VX7PE | Specifications | Date : 18/Sep./'20 |
|---|---|---|
| | | Rev. : 02 |

## Analog Quartz 12 3/4''' Movement / 3 hands (H/M/S) and 2 eyes
## with Day / Date indicators

### 1. MOVEMENT DIMENSIONS

| | |
|---|---|
| Outside diameter | $\phi$ 29.50mm × 26.00mm(3-9H) × 29.36mm(12-6H) |
| Casing diameter | $\phi$ 28.60mm × 25.60mm(3-9H) × 28.60mm(12-6H) |
| Total height | 3.99mm (including battery) |

### 2. TIME STANDARD

| | |
|---|---|
| Type of quartz oscillator | Tuning fork |
| Frequency of quartz oscillator | 32,768 Hz |
| Accuracy | ±20 seconds per month (on wrist) |
| Operating temperature range | −5℃ to ＋50℃ |
| Regulation device | Nil (Pre-adjusted) |

### 3. INDICATOR / FUNCTIONS

| | |
|---|---|
| 3 Hands | Hour / Minute / Second |
| 2 Small hands | Day(12H) / Date(6H) |
| Reset switch | |
| Setting mechanism | Crown at normal position : Free |
| | Crown pulled out 1st click : Instant date change |
| | Crown pulled out 2nd click : Time setting (Day change) / Reset |

### 4. FEATURES

| | |
|---|---|
| Jewels | 0 Jewels |
| Anti-magnetism | Over 1600A/m (Direct current magnetic field) |
| Maximum unbalance of hands | Second hand : 0.1 $\mu$ N・m |
| | Minute hand : 0.9 $\mu$ N・m |
| | Hour hand : 0.9 $\mu$ N・m |

### 5. BATTERY

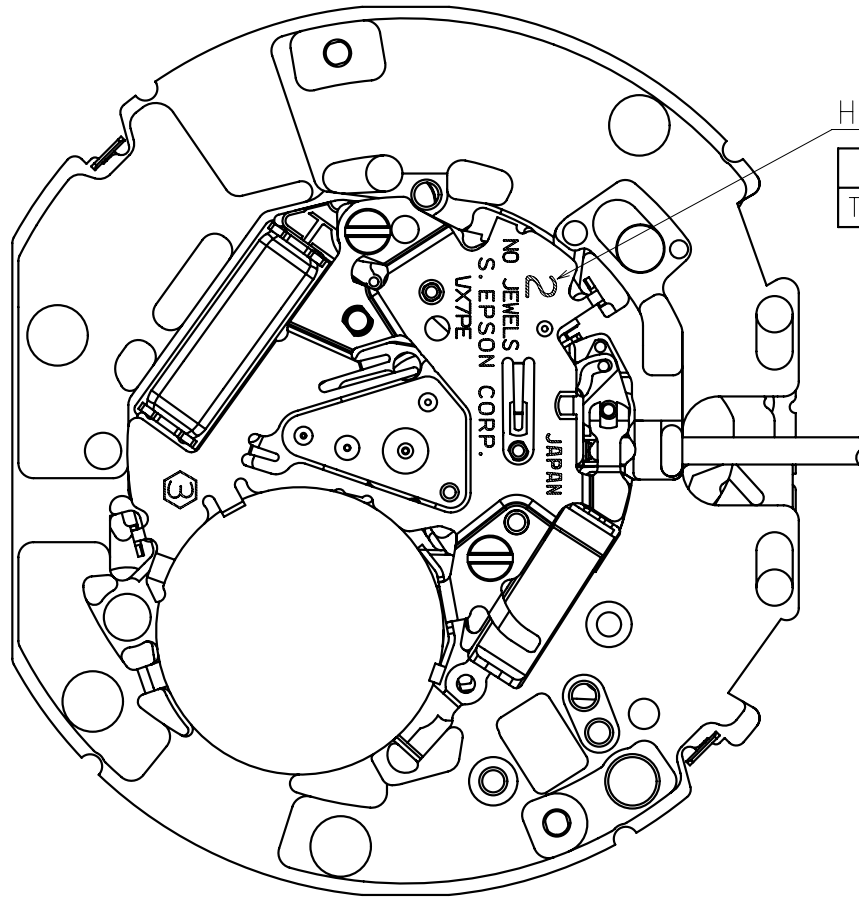| | |
|---|---|
| Type / Size | Silver oxide battery / $\phi$ 9.5mm × t 2.7mm |
| Recommended battery | SR927SW ( Maxell, Murata, Seizaiken ) |
| Nominal voltage | 1.55 V |
| Battery life | Approx. 3 years |
| Driving current consumption | Approx. 2.1 $\mu$ A |
| Operation stopping voltage | 1.2 V |

### 6. SEPARATED PARTS (Parts code)

| | |
|---|---|
| Hand setting stem | 0351578 or 0351177 |
| Battery | SR927SW |

### 7. TEST OF ACCURACY

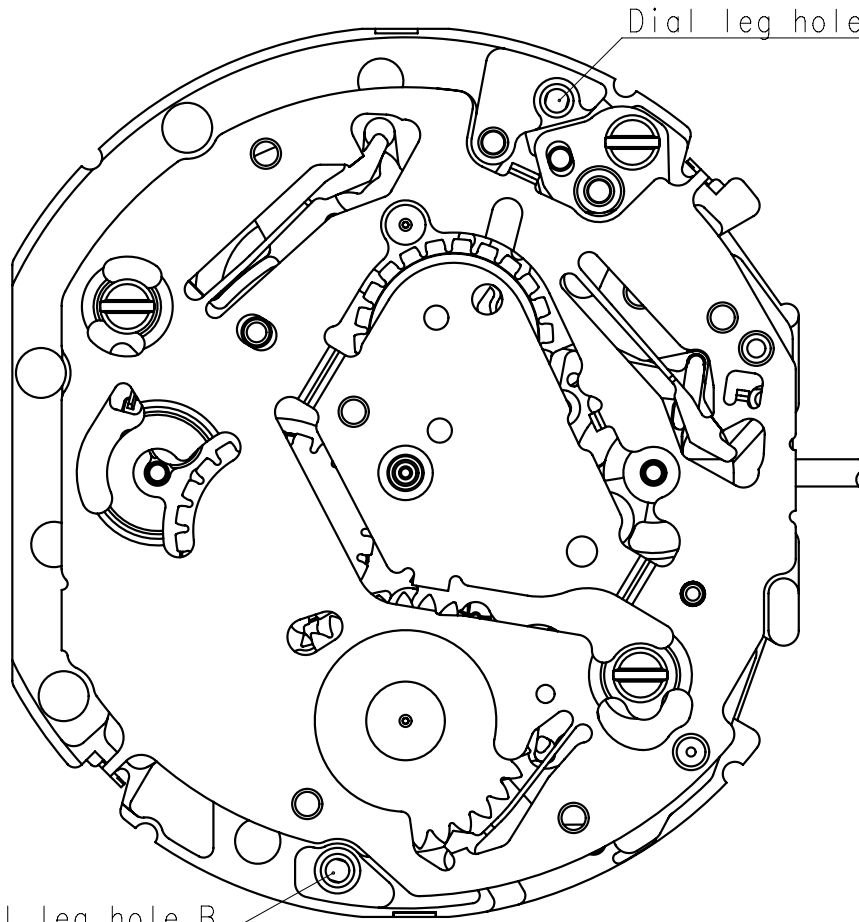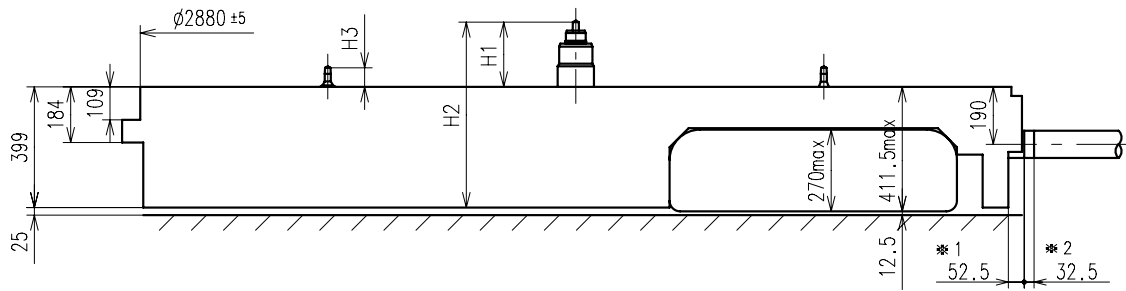| | |
|---|---|
| Equipment to be used | SEIKO quartz tester QT-99, |
| | Greiner quartz timer-C , Witschi Q-tester 4000 |
| Duration of measurement | 10 seconds |
| Microphone to be used | Electromagnetic detection type |

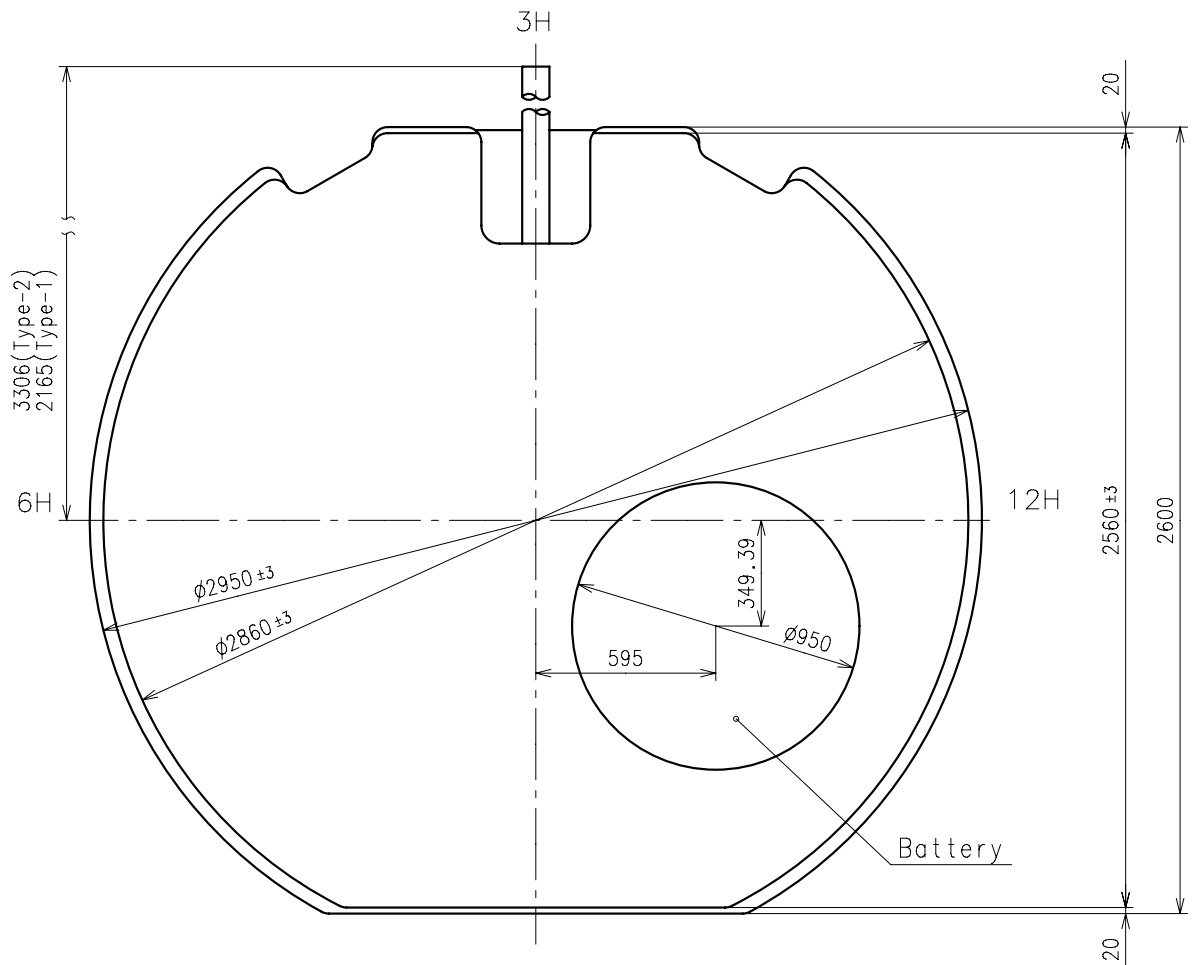All specifications are subject to change without notice.

Hands type

| | | Mark |
|---|---|---|
| | Type M | 2 |

NO JEWELS
S. EPSON CORP.
VX7PE
JAPAN

Dial leg hole A

Dial leg hole B

φ2880 ±5
H3
H1
184
109
399
H2
25
270max
411.5max
190
12.5
※1
52.5
※2
32.5



| Center post | | Type M (2) VX7PE** |
|---|---|---|
| Maximum height from dial support | H1 | 214 |
| Total height including movement | H2 | 613 |
| Maximum height from dial support | H3 | 63 |

※1:First pullout stroke
※2:Second pullout stroke

3H
20
3306(Type-2)
2165(Type-1)
6H
12H
2560 ±3
2600
φ2950 ±3
φ2860 ±3
349.39
φ950
595
20
Battery

※ Unbalance
· Hour hand   ≦ 0.9μN·m (90μg·m)
· Minute hand ≦ 0.9μN·m (90μg·m)
· Second hand ≦ 0.1μN·m (10μg·m)



Ø110 $^{+1}_{0}$  66

Hour wheel

Ø65.6 ±0.6  35

Center wheel

Ø20.05  Taper3/100
45  25
Ø20.8 ±0.65
Ø21.4 $^{+0.6}_{-0.5}$

Fourth wheel

3°
25 20
Ø21 ±0.6

Date wheel
Day  wheel
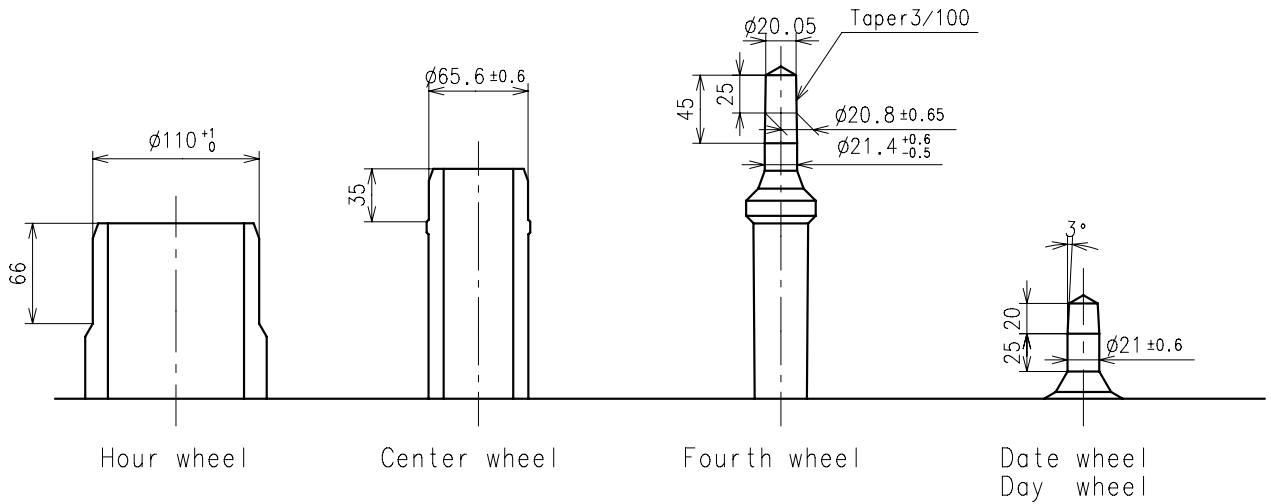
| | Parts No. | | | | |
| --- | --- | --- | --- | --- | --- |
| | Hour wheel | Center wheel | Fourth wheel | Date wheel | Day wheel |
| Type M (2) VX7PE** | 0271658 | 0221602 | 0241559 | 0970503 | 1002546 |



(Glass)

※1 R

L6
T
T
T
L1 L2 L3
L4
L5
L7
(Index)
(Dial)
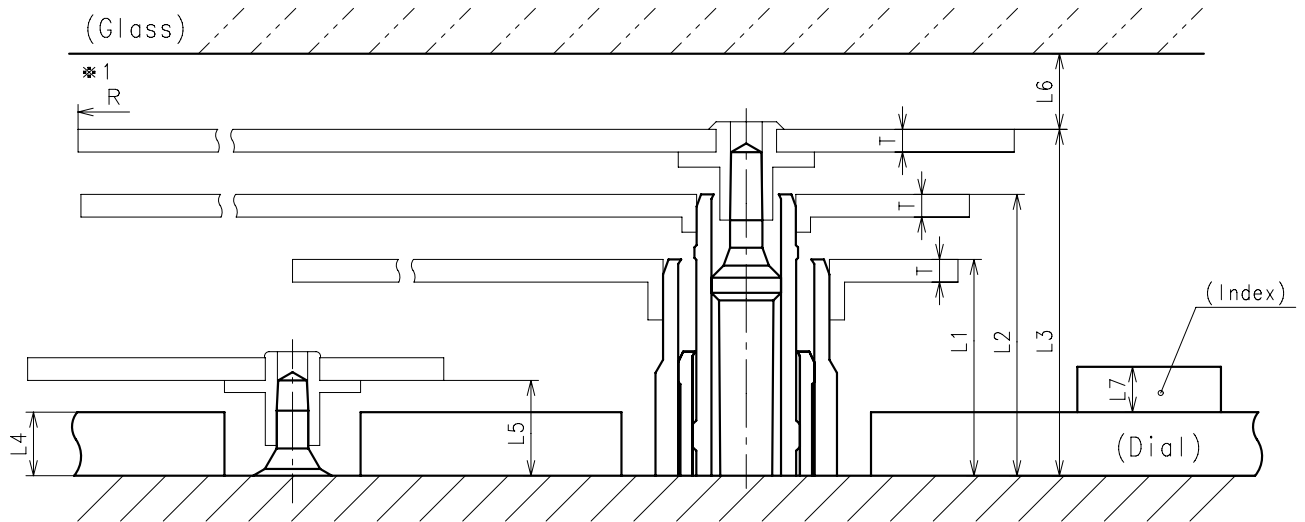
| | L1 | L2 | L3 | L4 | L5 | L6 | L7 | T | ※1 R |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type M (2) VX7PE** | 143 | 186 | 229 | 40 | 63 | MIN: 50 | MAX: 50 | 15 | MAX: 1250 |

※1:It is the size taken into consideration for hands attachment.
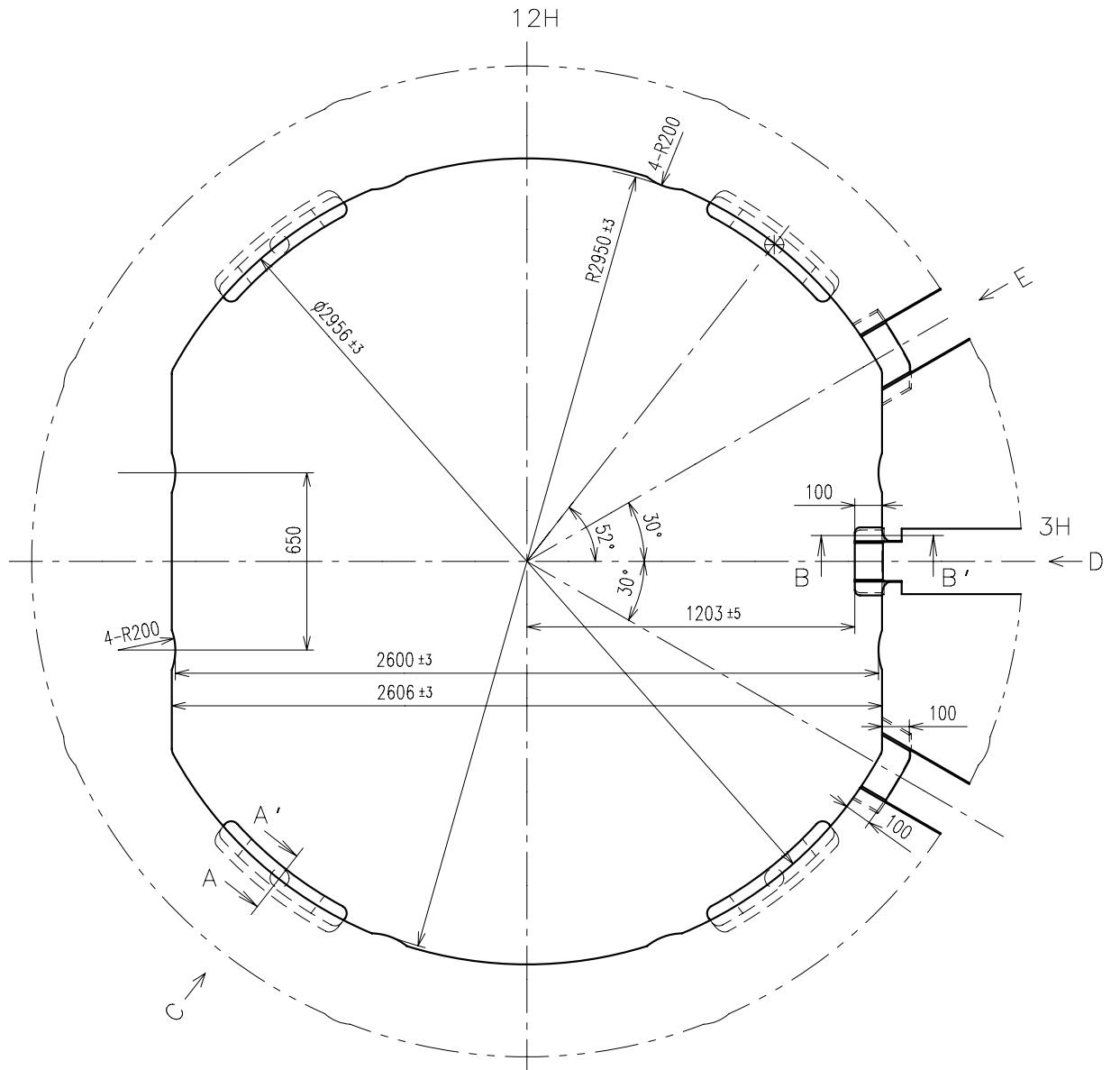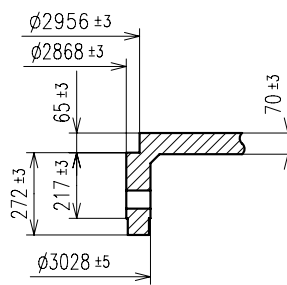   Please observe some standard value specified in unbalance when using long hands.

$\phi 90$ P22.5

$\phi 82 ^{+0.6}_{-0.8}$

$\phi 110 ^{0}_{-1.5}$

※ S3

S1

S2
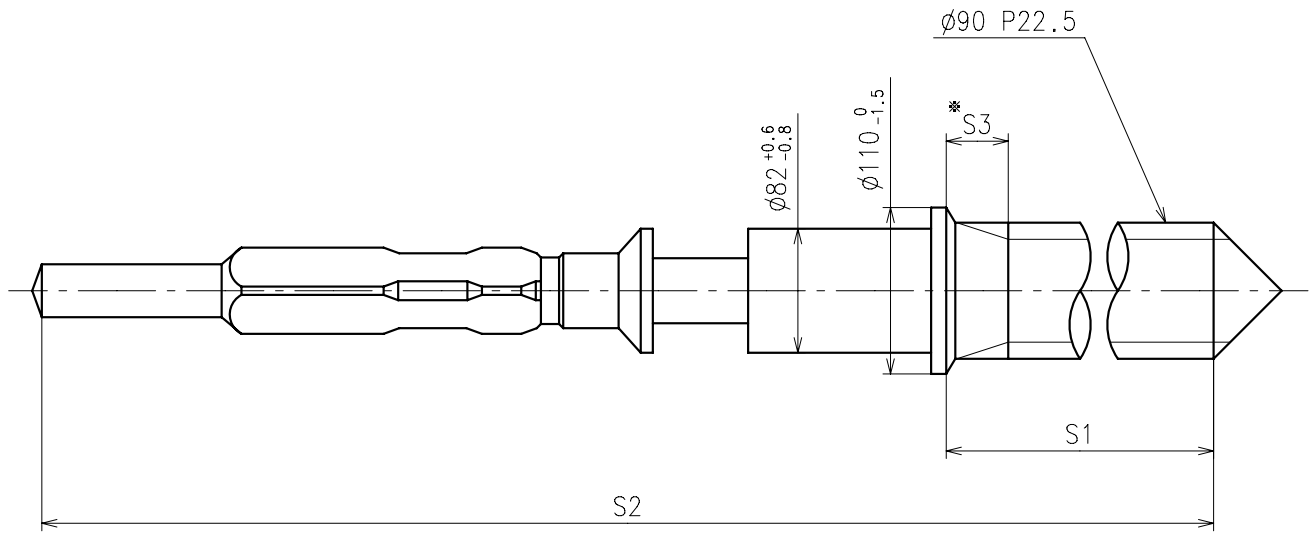
※ Not threaded

| | Part No. | S1 | S2 | ※ S3 |
|---|---|---|---|---|
| Type-1 | 0351177 | 1366 | 1964 | 60 |
| Type-2 (Standard) | 0351578 | 2507 | 3105 | 650 |

Material : Steel

Hardness : Vickers 600±50

12H

500

A

Day

1230

820

Date

820

1315

3H

B

225

A,B

Day
Date

(40)

$180^{+100}_{-45}$

R10

$\phi75\pm2$

$\phi165^{+5}_{-10}$

$\phi90\pm5$

12H

R2950 ±3

4-R200

ø2956 ±3

650

4-R200

2600 ±3

2606 ±3

52°

30°

30°

1203 ±5

100

B

B'

3H

D

E

100

100

A'

A

C

C view

70 ±3

340 ±3

60 ±3

32 ±3

A-A' section

ø2956 ±3
ø2868 ±3

65 ±3

70 ±3

272 ±3

217 ±3

ø3028 ±5

E view

200 ±5

145 ±3

85 ±3

300 ±5

D view

240 ±3

135 ±5

145 ±3

85 ±3

230 ±5

B-B' section

25 ±3

72 ±5

125 ±5
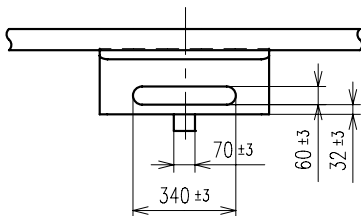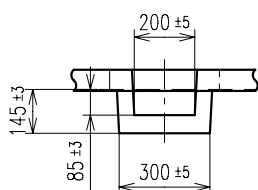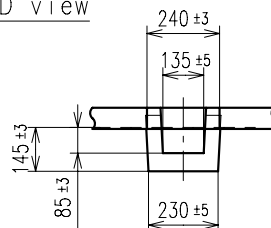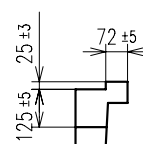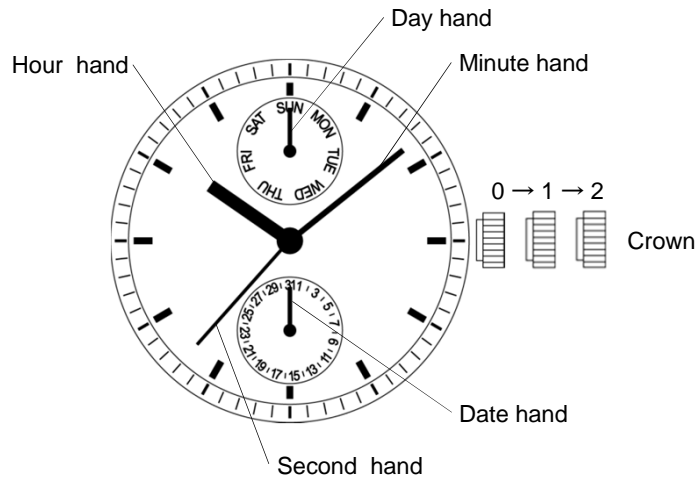
| | Crown position | | |
|---|---|---|---|
| | 0 click | 1st click | 2nd click |
| Crown | Free | Turn counterclockwise for date change | Time setting (Day change) |

\* Do not set the day and date between 9:00 PM and 4:00 AM.

Otherwise, the day and date may not change properly.