

# Cal. VC00E

14.50 mm

[ 12H --- 6H ]

10.80 mm

[ 3H --- 9H ]

H 2.38 mm

<b>Item</b>	<b>Version No.</b>
<b>Specification</b>	<b>Version 2</b>
<b>Appearance</b>	<b>Version 4</b>
<b>Casing</b>	<b>Version 5</b>
<b>Hand Fitting</b>	<b>Version 5</b>
<b>Hand Setting Stem</b>	<b>Version 5</b>
<b>Dial - 1</b>	<b>Version 4</b>
<b>Casing Ring - 1</b>	<b>Version 2</b>
<b>Casing Ring - 2</b>	<b>Version 2</b>
<b>Assembly Plan</b>	<b>Version 4</b>
<b>Hands</b>	<b>Version 3</b>



## MOVEMENT SPECIFICATIONS

### CAL.VC00E 4 3/4 Ligne Quartz Movement Two Hands

#### 1. MOVEMENT DIMENSIONS

- Outside diameter  $\phi$  14.50mm (12H~6H) x 10.80mm (3H~9H)
- Casing diameter  $\phi$  13.90mm (12H~6H)
- Total height 2.38 mm (including the battery)

#### 2. TIME STANDARD

- Type of quartz oscillator Tuning fork
- Frequency of quartz oscillator 32,768 H Z
- Accuracy Monthly rate: Less than 20 seconds per month at normal temperature range
- Regulation device Nil
- Regulation hands unbalance Minute : Less than 0.40 $\mu$ N·m (40.0mg·mm)  
Hour : Less than 0.60 $\mu$ N·m (60.0mg·mm)

#### 3. BATTERY

- Type Silver oxide battery
- Size  $\phi$  5.8 x t 2.1 ( mm )
- Battery life Approx. 2 years
- Recommended battery SR521SW ( SEIZAIKEN )

#### 4. STEPPING MOTOR

- Type Two pole stepping motor
- Step 180° every second

#### 5. JEWEL

0 jewel

#### 6. ANTIMAGNETISM ( direct current magnetic field )

$\geq$  1600 A / m

#### 7. SHOCK RESISTANCE

On equal level with general quartz movement

#### 8. OPERATING TEMPERATURE RANGE

From - 5°C to + 50°C

#### 9. SETTING MECHANISM

- Crown at normal position Free
- Crown pulled out to 1st click Time setting, second setting and reset switch

#### 10. TEST OF ACCURACY

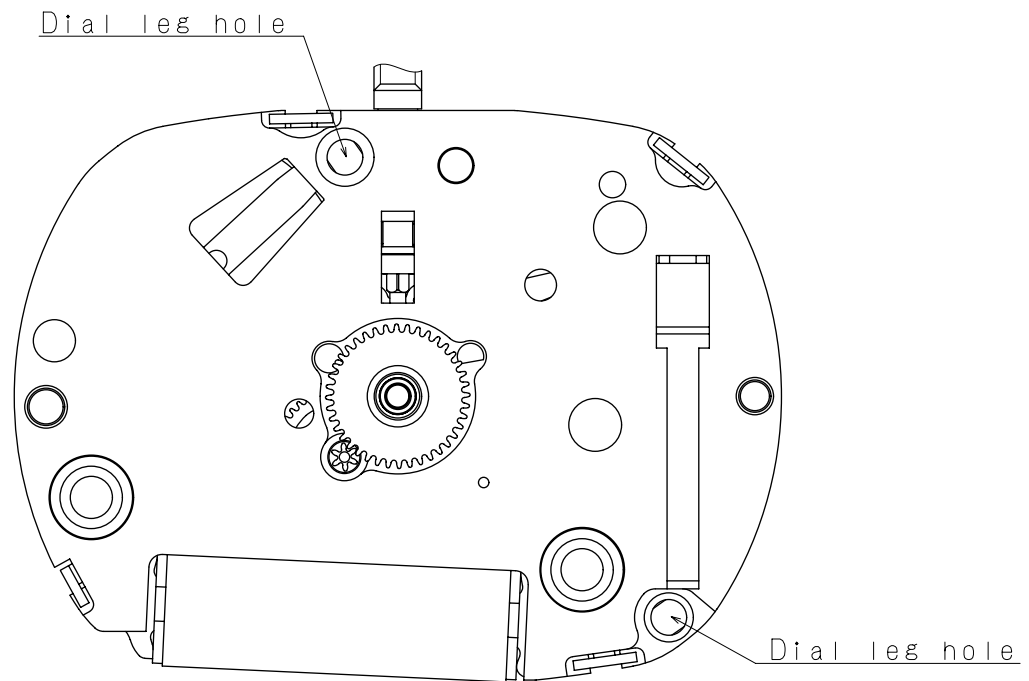
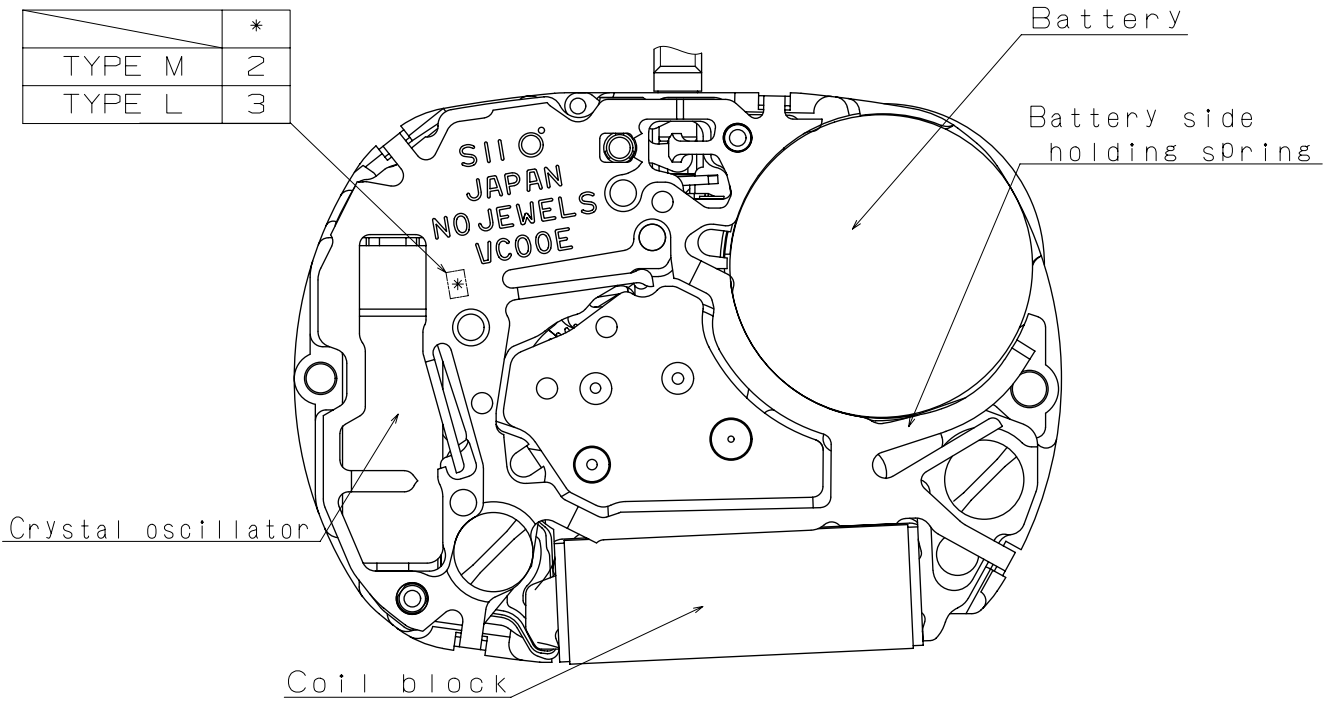
- Equipment to be used Quartz Tester QT - 99  
Greiner Quartz Timer - C  
Witschi Q-Tester 4000
- Duration of measurement 10 seconds
- Microphone to be used Electromagnetic detection type (DM-1)

#### 11. ATTACHED PARTS

Parts Name	Parts Code
Silver oxide battery	3016 - 1410
Hand setting stem	0351-1730 (Regular) / 0351-1200 (Long)
Hour wheel	0271 - 2980
Dial washer	0491 - 0130

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

	*
TYPE M	2
TYPE L	3



Scale : 7/1

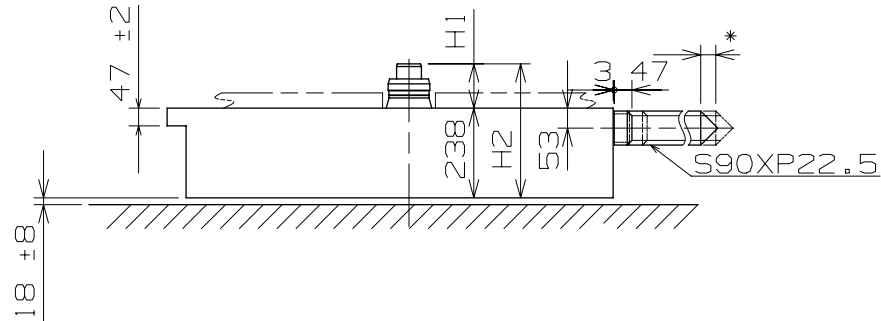
Version:4

Unit : 1=1/100mm

# Casing

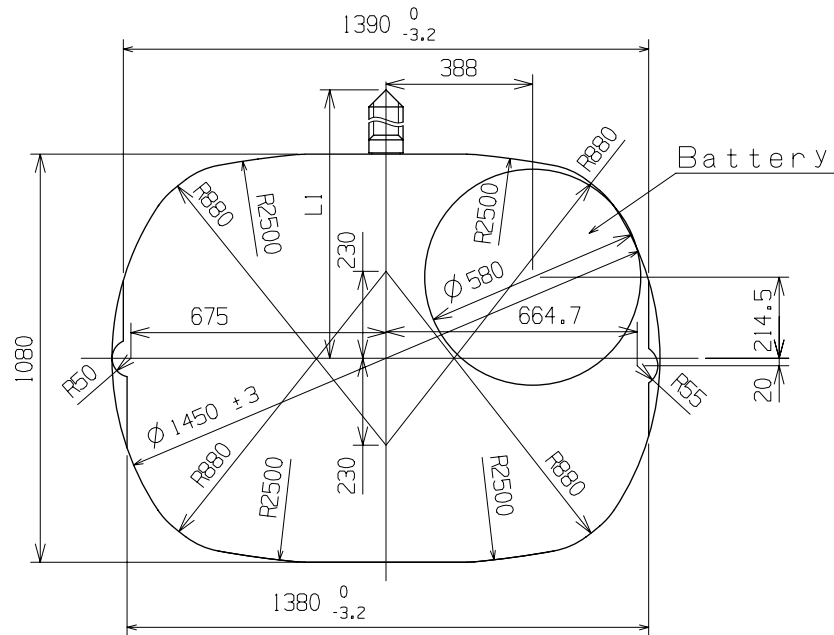
Cal. VCO0E

Battery Side holding spring Type. \* Pull out stroke 40



Center post		TYPE M	TYPE L
Maximum height from main plate surface	H1	117	150
Total height incl. movement	H2	355	388

Hand Setting Stem	TYPE A	TYPE B
L1	1648	2140



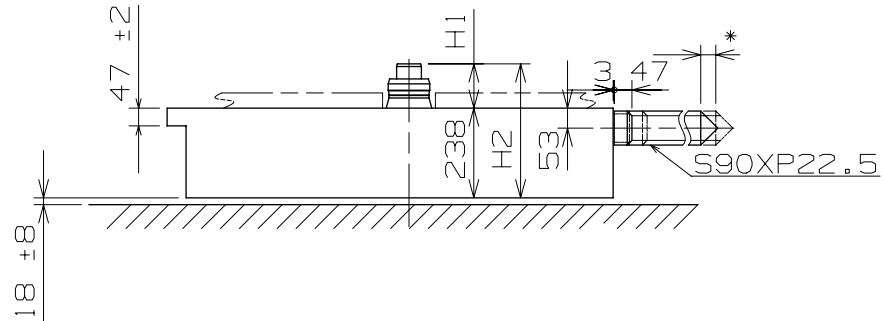
Scale : 5/1  
Unit : 1=1/100mm

Version:5

# Casing

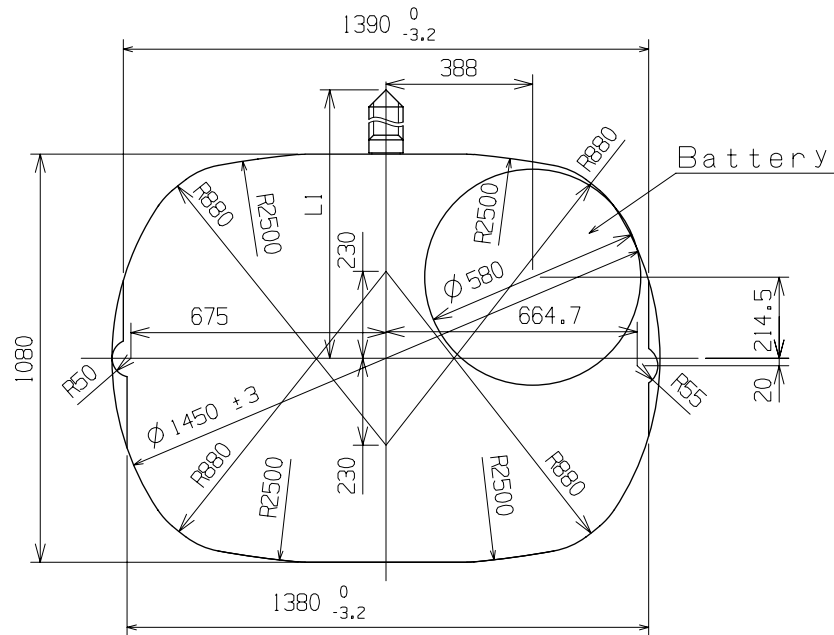
Cal. VC00E

Battery Side holding spring Type. \* Pull out stroke 40



Center post 中心柱位		TYPE M 一般針高	TYPE L 高針
Maximum height from main plate surface. 與機芯平面之最大高度	H1	117	150
Total height incl. movement. 機芯總高度	H2	355	388

Hand Setting Stem	TYPE A	TYPE B
L1	1648	2140



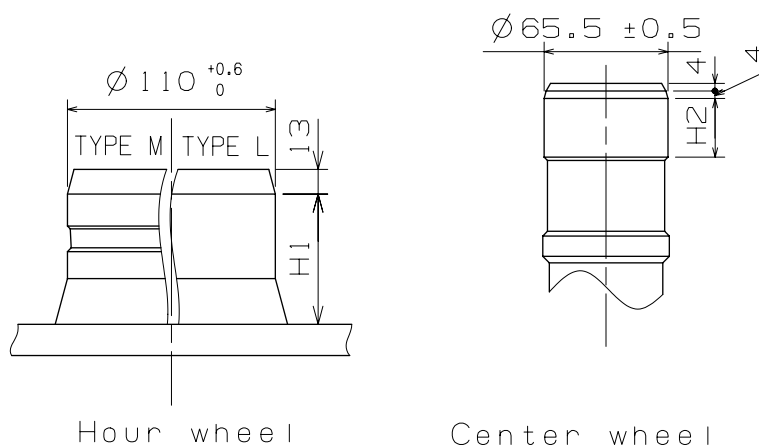
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Unit : 1=1/100mm

Version:5

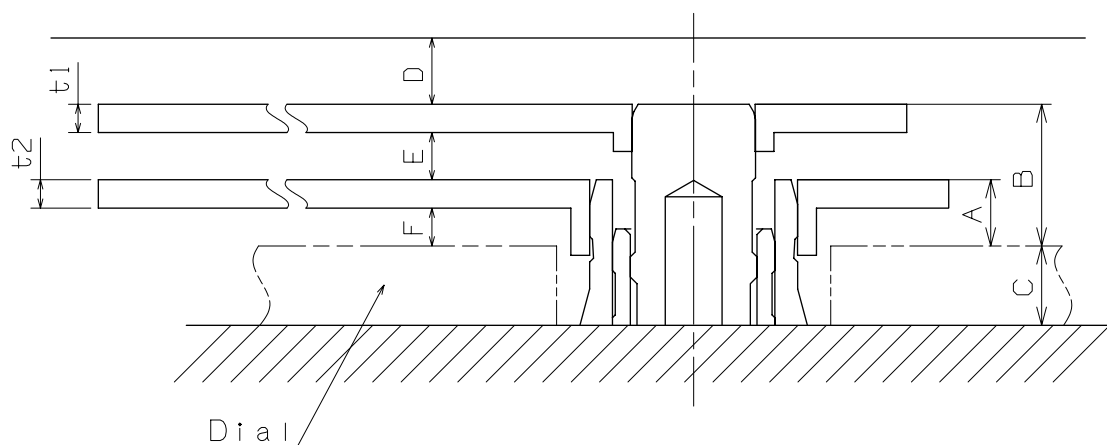
# Hand fitting

Cal. VC00E

Hour hand unbalance  $\leq 0.6 \mu\text{N}\cdot\text{m}$  ( $60\text{mg}\cdot\text{mm}$ )  
 Minute hand unbalance  $\leq 0.4 \mu\text{N}\cdot\text{m}$  ( $40\text{mg}\cdot\text{mm}$ )



	Part. No.		Dimension	
	Hour wheel	Center wheel	H1	H2
TYPE M	0271 2980	0270 0820	69	31
TYPE L	0271 3040	0270 0830	99	56



	A	B	C	D	E	F	t1	t2
TYPE M	37	77	40	35	25	22	15	15
TYPE L	35	78	72	35	28	20	15	15

Scale : 25/1

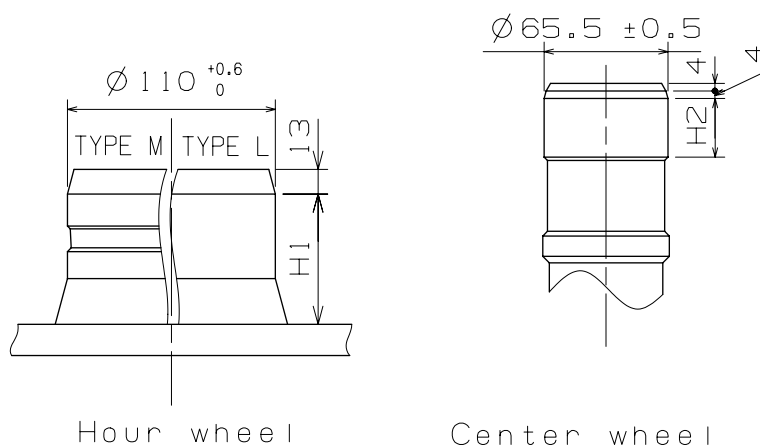
Version:5

Unit : 1=1/100mm

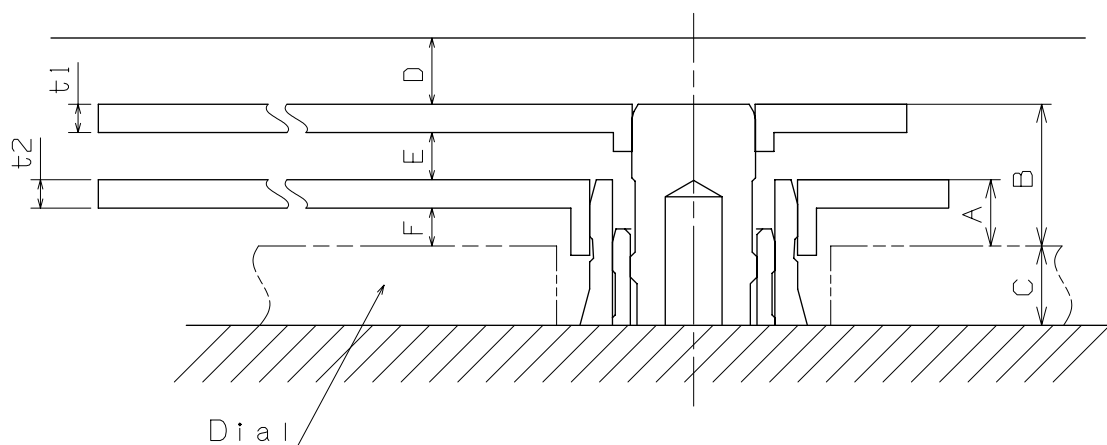
# Hand fitting

Cal. VC00E

Hour hand unbalance  $\leq 0.6 \mu\text{N}\cdot\text{m}$  (60mg·mm)  
 Minute hand unbalance  $\leq 0.4 \mu\text{N}\cdot\text{m}$  (40mg·mm)



	Part. No.		Dimension	
	Hour wheel 時針輪	Center wheel 分針輪	H1	H2
TYPE M 一般針高	0271 2980	0270 0820	69	31
TYPE L 高針	0271 3040	0270 0830	99	56

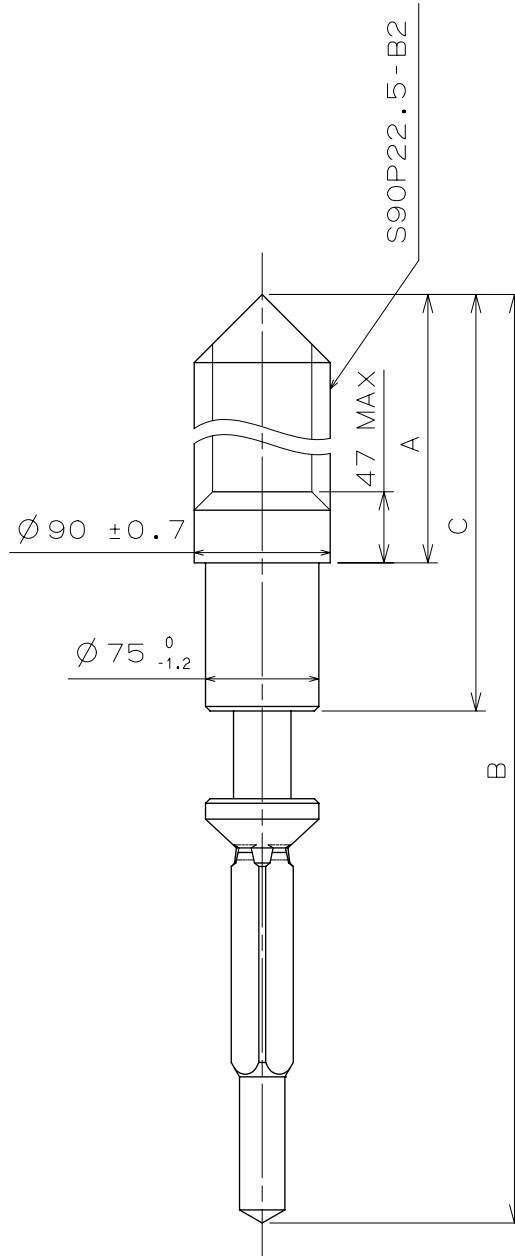


	A	B	C	D	E	F	t1	t2
TYPE M 一般針高	37	77	40	35	25	22	15	15
TYPE L 高針	35	78	72	35	28	20	15	15

Scale : 25/1

Version:5

Unit : 1=1/100mm



	Part.No.	A	B	C
TYPE A	0351 1730	1105	1542	1203
TYPE B	0351 1200	1597	2034	1695

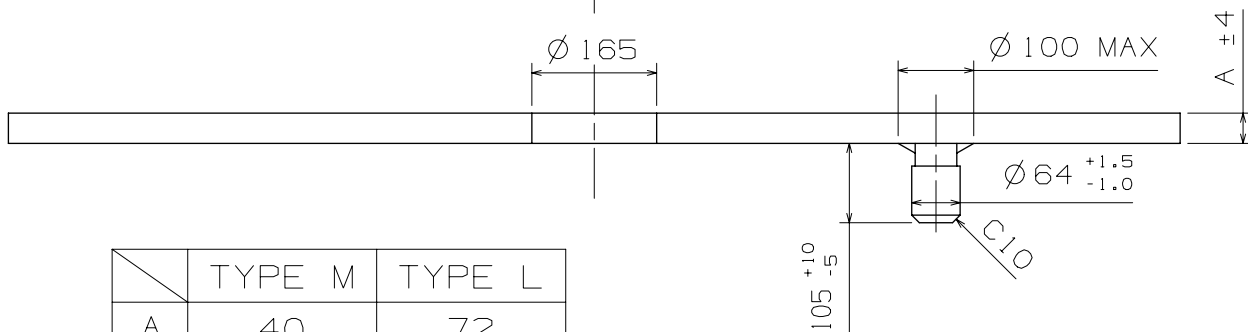
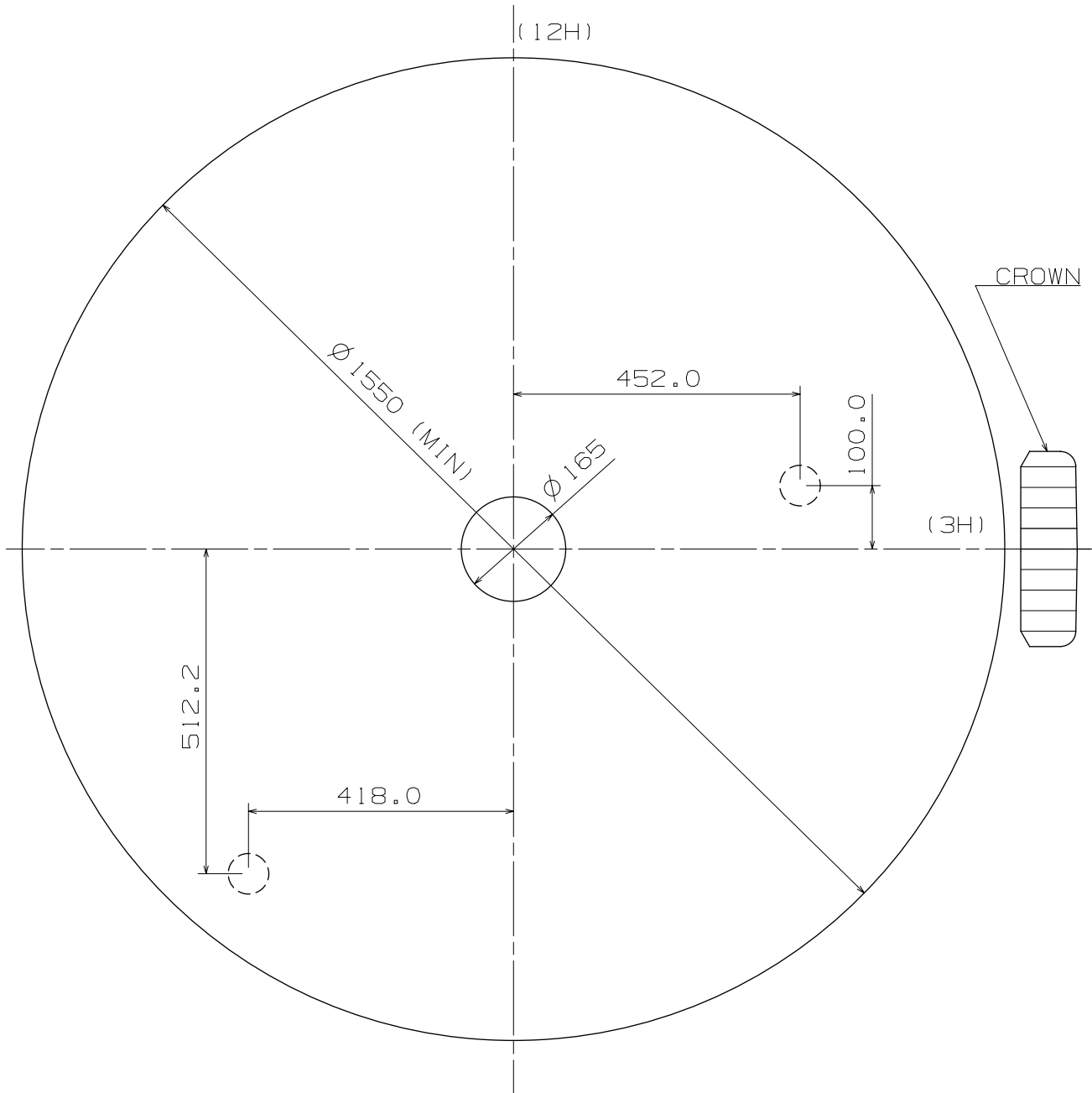
Scale : 20/1  
Unit : 1=1/100mm

Version:5



# Dial - 1

Cal. VCO0E



	TYPE M	TYPE L
A	40	72

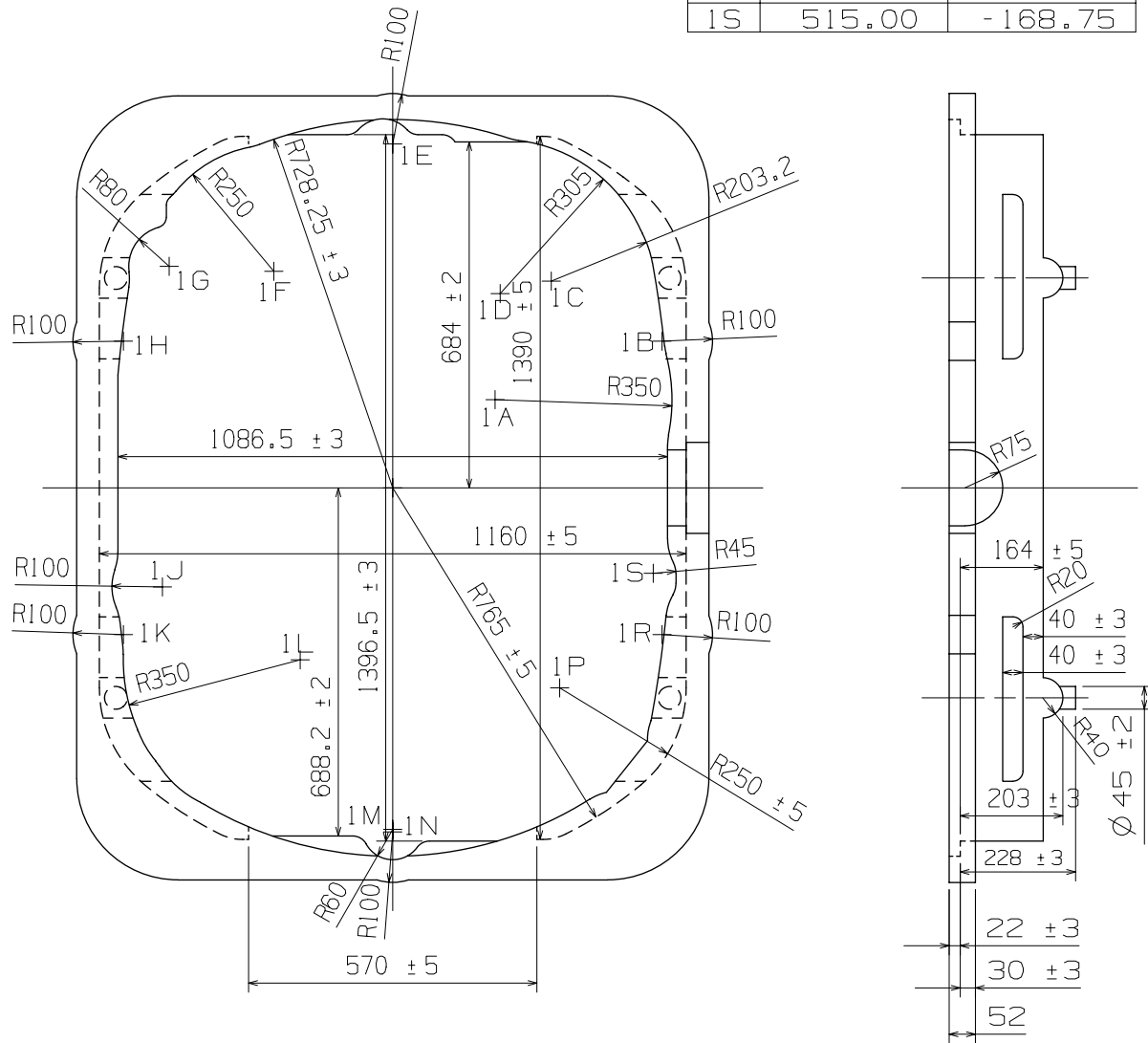
Scale : 10/1  
Unit : 1=1/100

Version:4

# Casing Ring-1

Cal. VCOOE

	X	Y
C	0.00	0.00
1A	202.41	174.30
1B	532.50	290.00
1C	313.37	408.84
1D	212.28	383.98
1E	0.00	680.00
1F	-235.18	428.13
1G	-442.14	438.08
1H	-532.50	290.00
1J	-455.42	-195.67
1K	-532.50	-290.00
1L	-182.96	-339.98
1M	0.00	-675.00
1N	0.00	-680.00
1P	330.00	-395.38
1R	532.50	-290.00
1S	515.00	-168.75



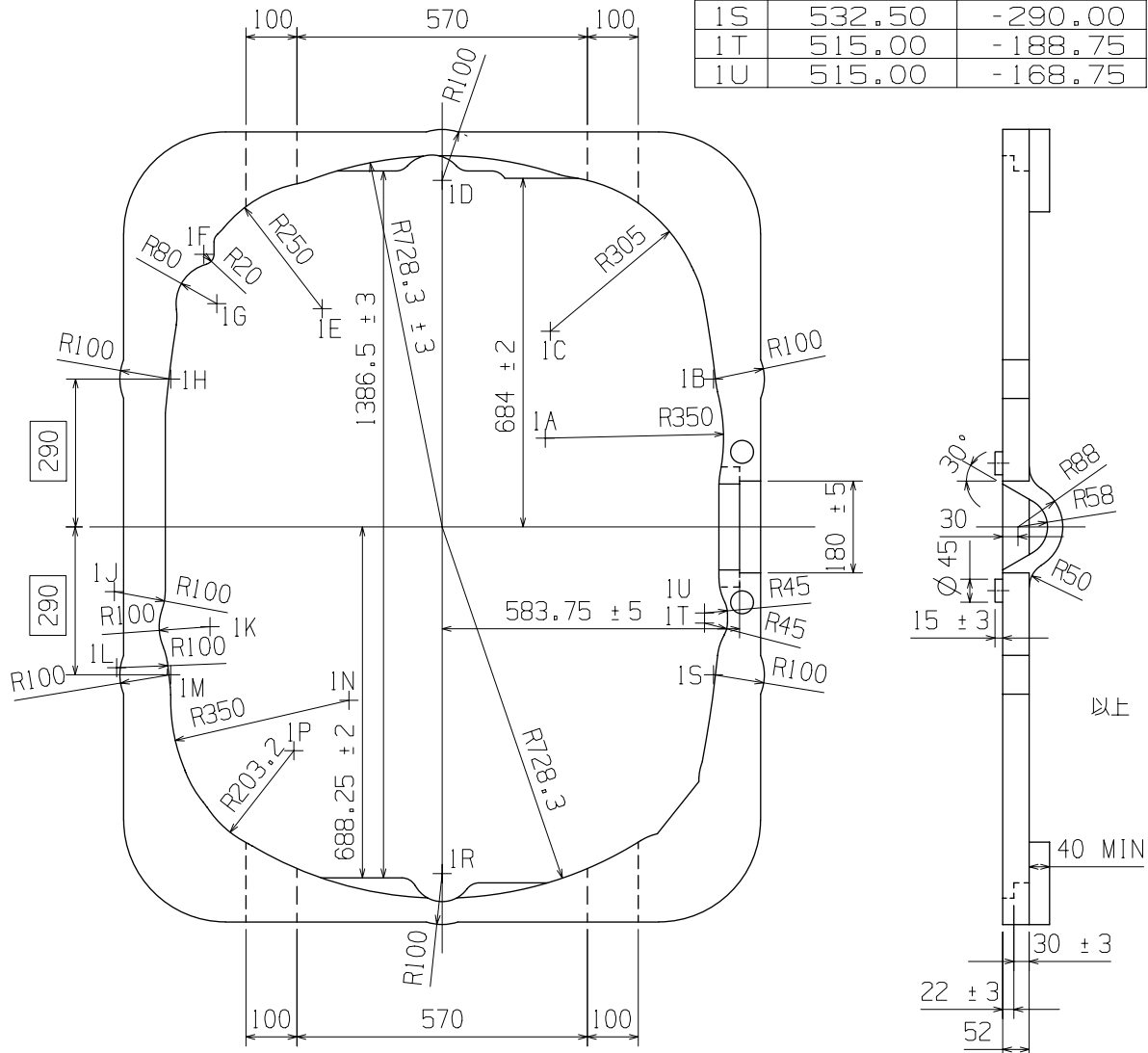
Scale : 7/1  
Unit : 1=1/100

Version:2

# Casing Ring-2

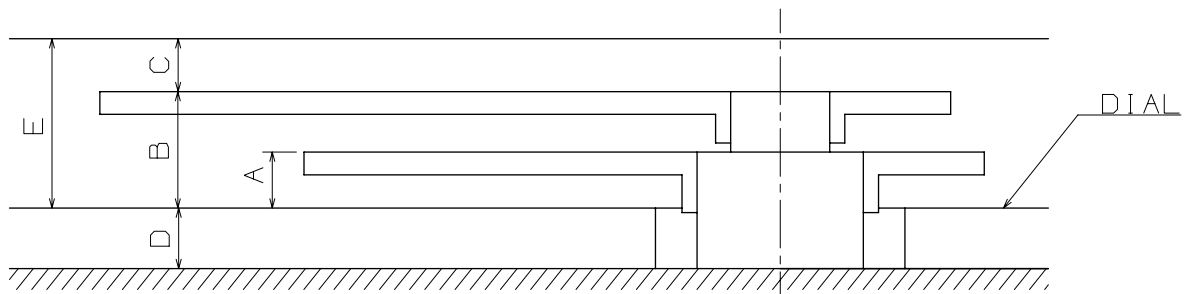
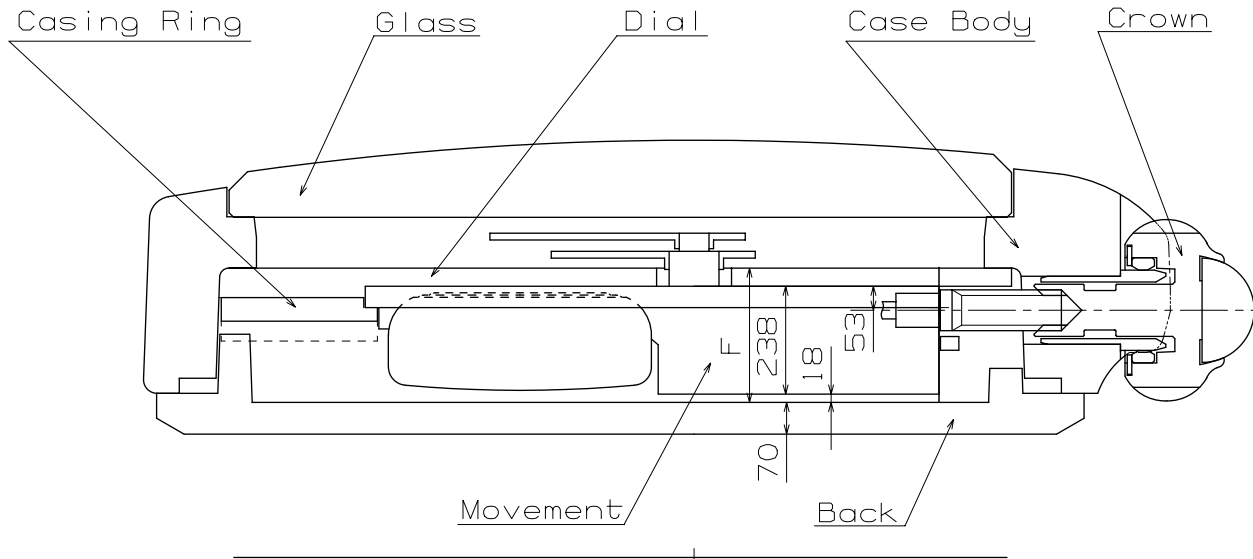
Cal. VCOOE

	X	Y
C	0.00	0.00
1A	202.41	174.30
1B	532.50	290.00
1C	212.28	383.98
1D	0.00	680.00
1E	-235.18	428.13
1F	-467.69	534.76
1G	-442.14	438.08
1H	-532.50	290.00
1J	-643.25	-126.97
1K	-455.42	-195.67
1L	-638.58	-276.00
1M	-532.50	-290.00
1N	-182.96	-339.98
1P	-291.03	-438.95
1R	0.00	-675.00
1S	532.50	-290.00
1T	515.00	-188.75
1U	515.00	-168.75



Scale : 7/1  
Unit : 1=1/100

Version:2



	A	B	C	D	E	F
TYPE M	37	77	35	40	112	296
TYPE L	35	78	35	72	113	328

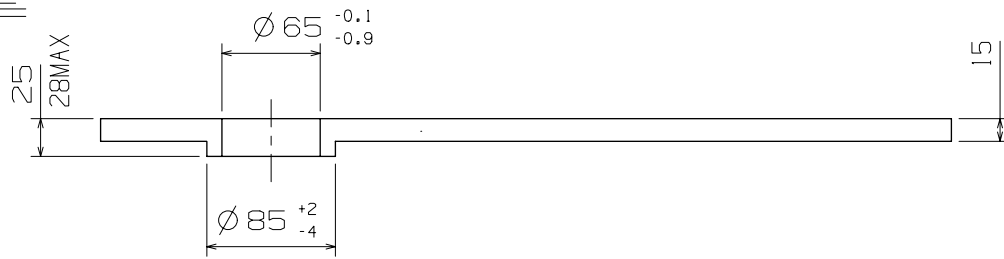
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Unit : 1=1/100

Version:4

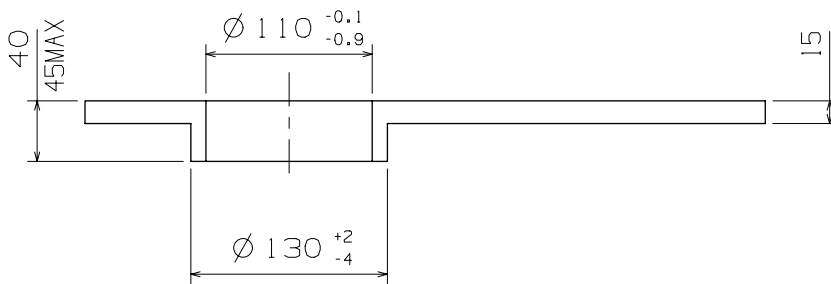
# Hands

Cal. VCO0E

## MINUTE



## HOUR



Scale : -

Unit : 1=1/100

Version:3