

# Cal. PC21S

$\phi$  18.50 mm

H 3.15 mm

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



## MOVEMENT SPECIFICATIONS

### CAL.PC21S 6 3/4 X 8 Ligne Quartz Movement Three Hands

#### 1. MOVEMENT DIMENSIONS

- Outside diameter  $\phi$  18.20mm (12H-6H) x 14.11mm (3H-9H),  $\phi$  18.50mm
- Casing diameter  $\phi$  17.80mm (12H-6H) ,  $\phi$  18.10mm
- Total height 3.15 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 30 seconds per month at normal temperature range
- Regulation device Nil
- Regulation hands unbalance
  - Second : Less than 0.07 $\mu$ N·m (7mg·mm)
  - Minute : Less than 0.30 $\mu$ N·m (30mg·mm)
  - Hour : Less than 0.30 $\mu$ N·m (30mg·mm)

#### 3. BATTERY

- Type Silver oxide battery
- Size  $\phi$  6.8 x t 2.6 ( mm )
- Battery life Approx. 2 years
- Recommended battery SR626SW ( 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

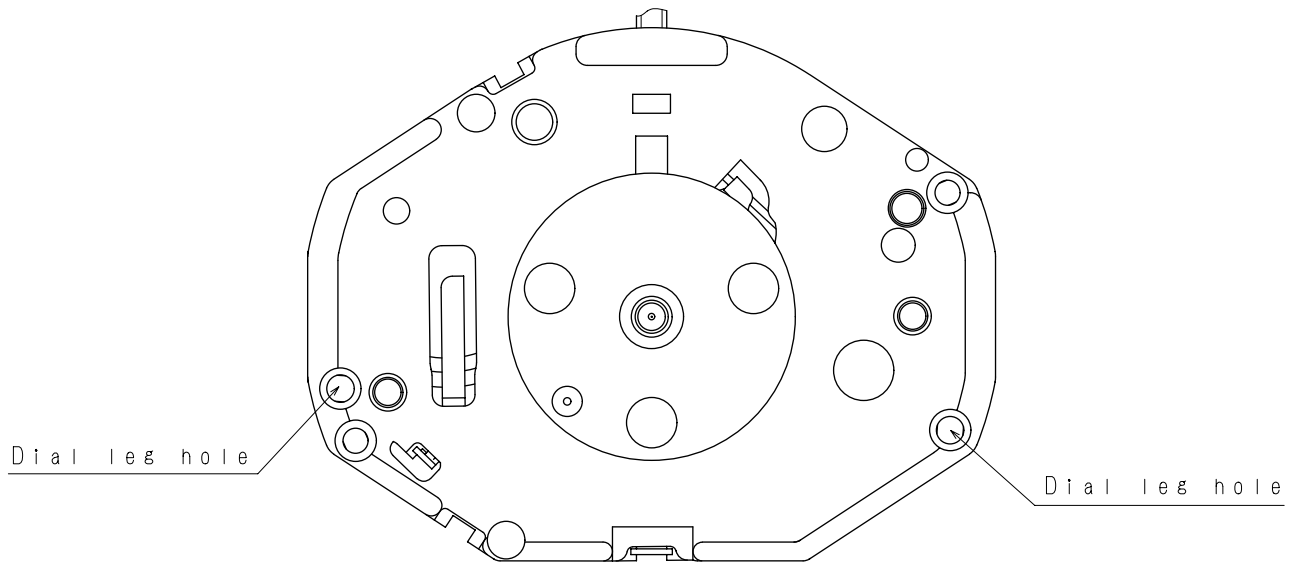
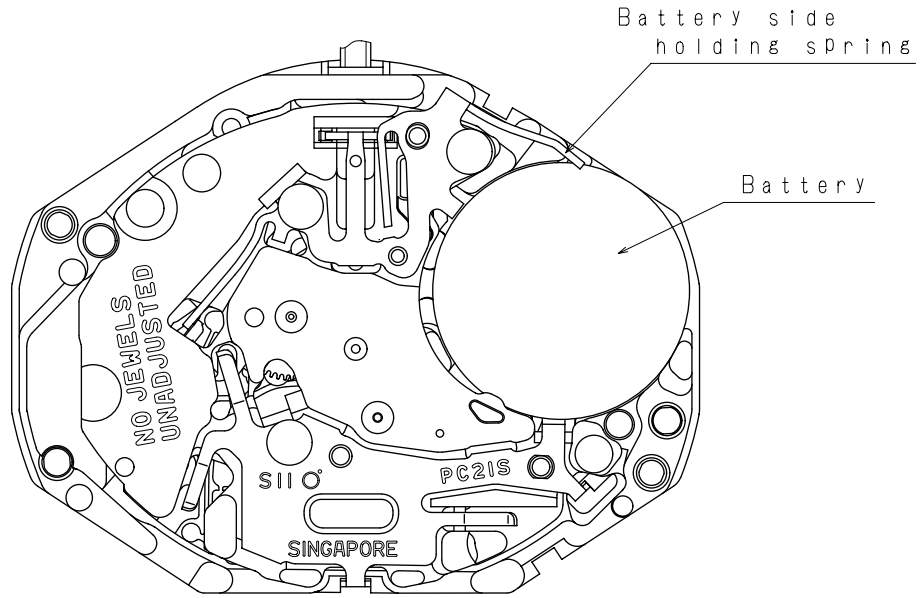
#### 10. TEST OF ACCURACY

- 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 - 18V0
Hand setting stem (Standard type)	0354 - 1220

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

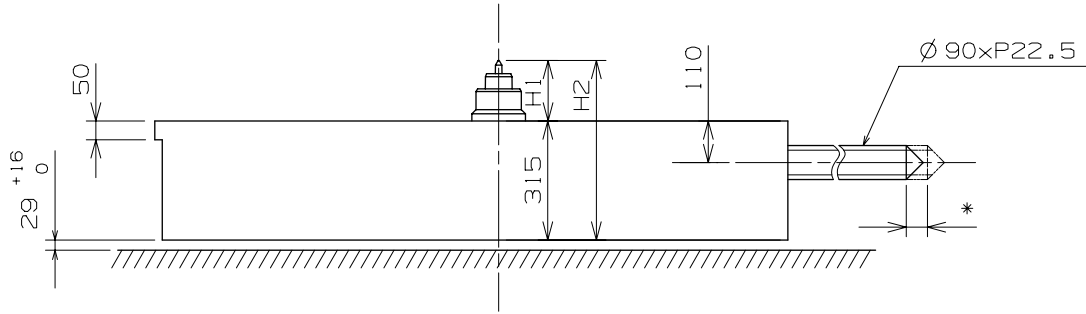


Scale : 5/1

Version:5

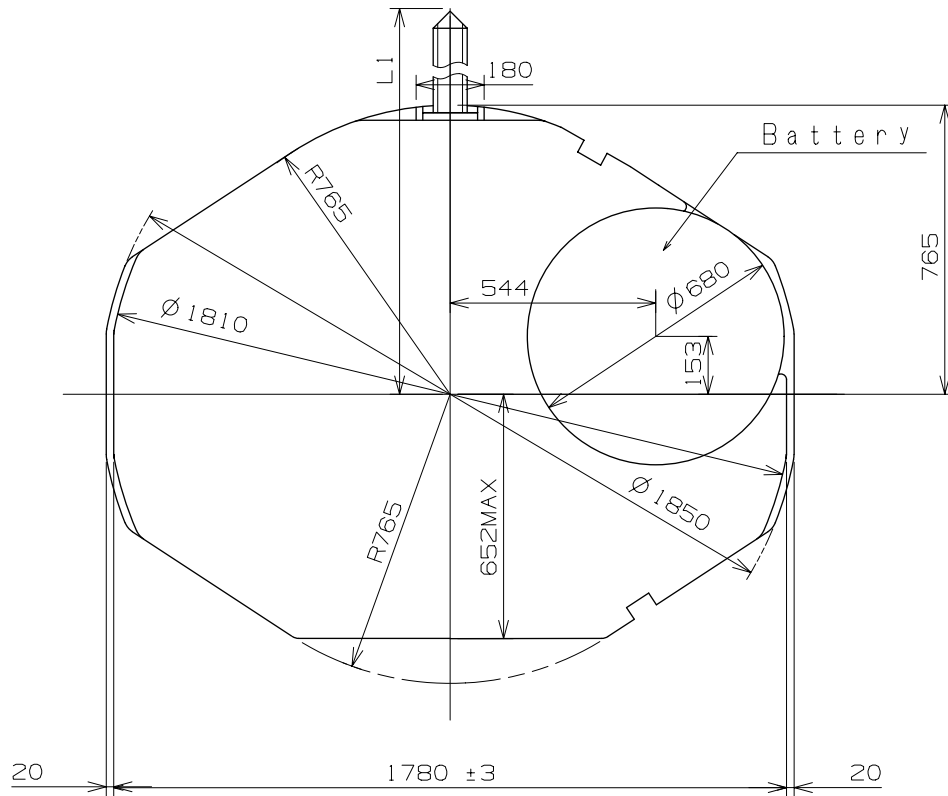
Unit : 1=1/100mm

\* Pull out stroke: 56



Center post		TYPE M
Maximum height from main plate surface	H1	160
Total height incl. movement	H2	475

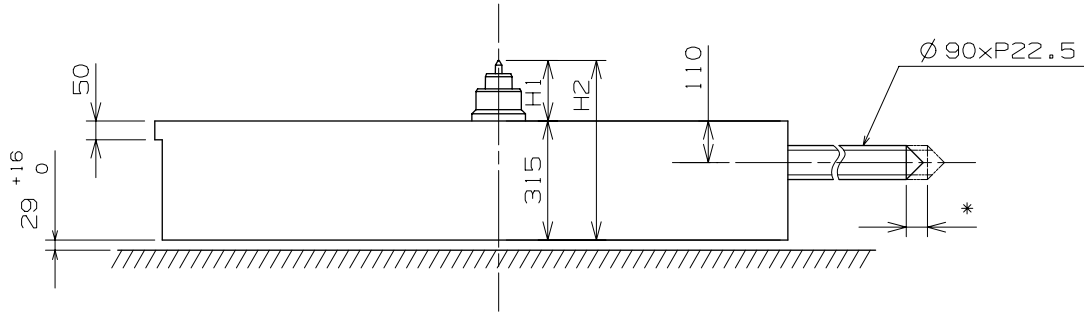
Hand Setting Stem	TYPE A	TYPE B
L1	2012	2472



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

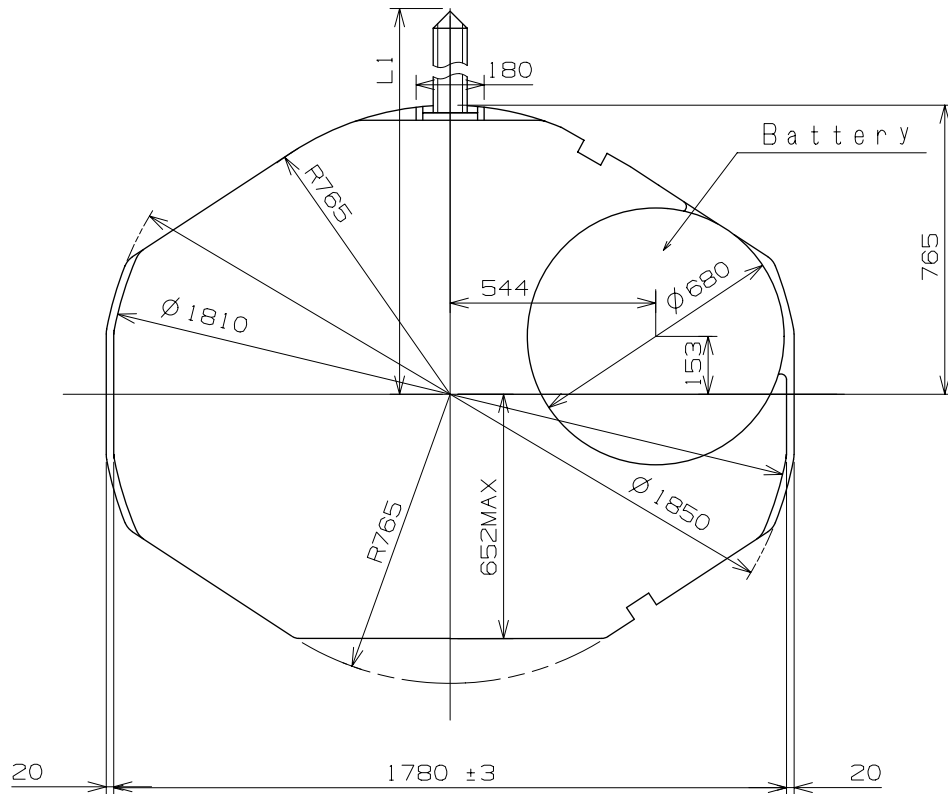
Version:4

\* Pull out stroke: 56



Center post 中心柱位		TYPE M 一般針高
Maximum height from main plate surface. 與機芯平面之最大高度	H1	160
Total height incl. movement. 機芯總高度	H2	475

Hand Setting Stem	TYPE A	TYPE B
L1	2012	2472



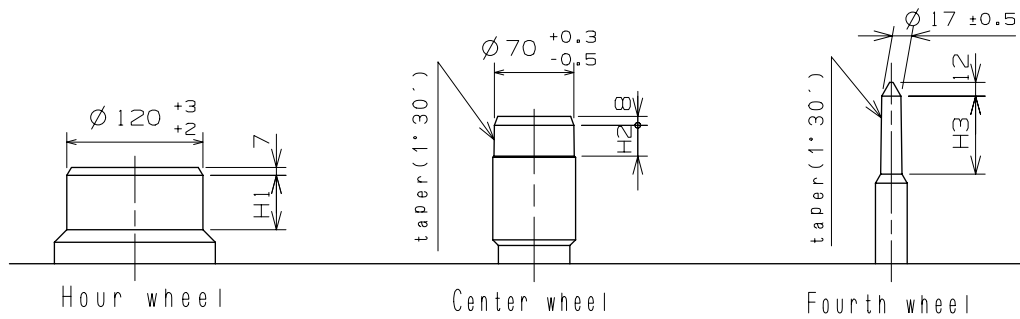
Scale : 5/1  
Unit : 1=1/100mm

Version: 4

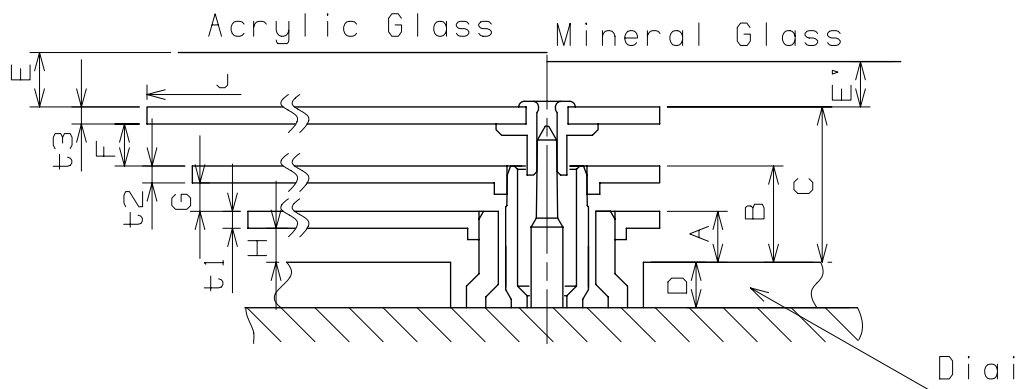
# Hand Fitting

Cal. PC215

Hour hand unbalance  $\leq 0.3\mu\text{N}\cdot\text{m}$  (30mg·mm)  
 Minute hand unbalance  $\leq 0.3\mu\text{N}\cdot\text{m}$  (30mg·mm)  
 Second hand unbalance  $\leq 0.07\mu\text{N}\cdot\text{m}$  (7mg·mm)



	Part. No.			Dimension		
	Hour wheel	Center wheel	Fourth wheel	H1	H2	H3
TYPE M	0271 3940	0221 3940	0241 3940	48	27	69



	A	B	C	D	E	E'	F	G	H	t1	t2	t3
TYPE M	45	85	137	40	*	*	37	25	30	15	15	15

*	J		
	Max	800	800~850
E'	Min 40	Min 45	Min 65
E	Min 48	Min 53	Min 73

Scale : 15/1

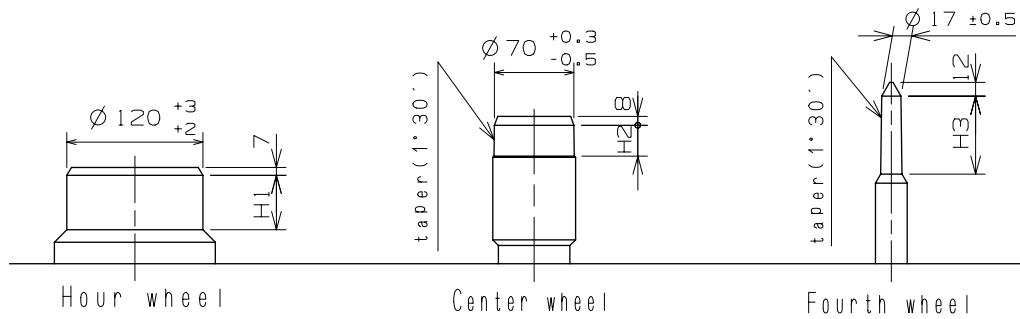
Unit : 1=1/100mm

Version:5

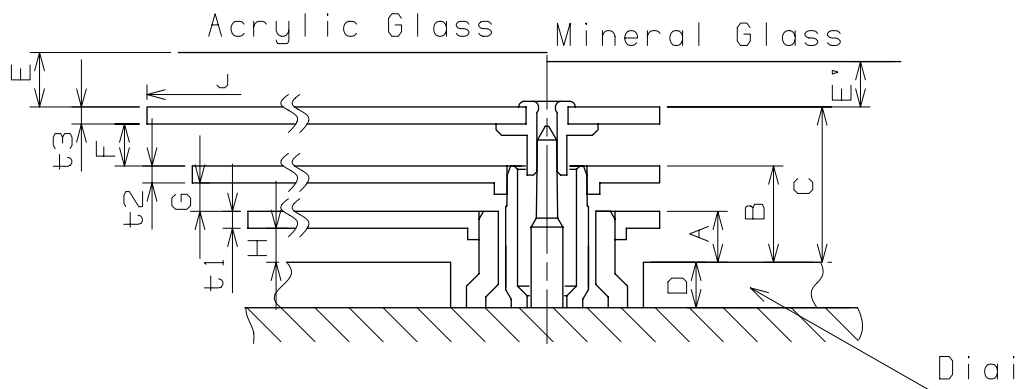
# Hand Fitting

Cal. PC215

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 Minute hand unbalance  $\leq 0.3\mu\text{N}\cdot\text{m}$  (30mg·mm)  
 Second hand unbalance  $\leq 0.07\mu\text{N}\cdot\text{m}$  (7mg·mm)



	Part. No.			Dimension		
	Hour wheel 時針輪	Center wheel 分針輪	Fourth wheel 秒針輪	H1	H2	H3
TYPE M 一般針高	0271 3940	0221 3940	0241 3940	48	27	69

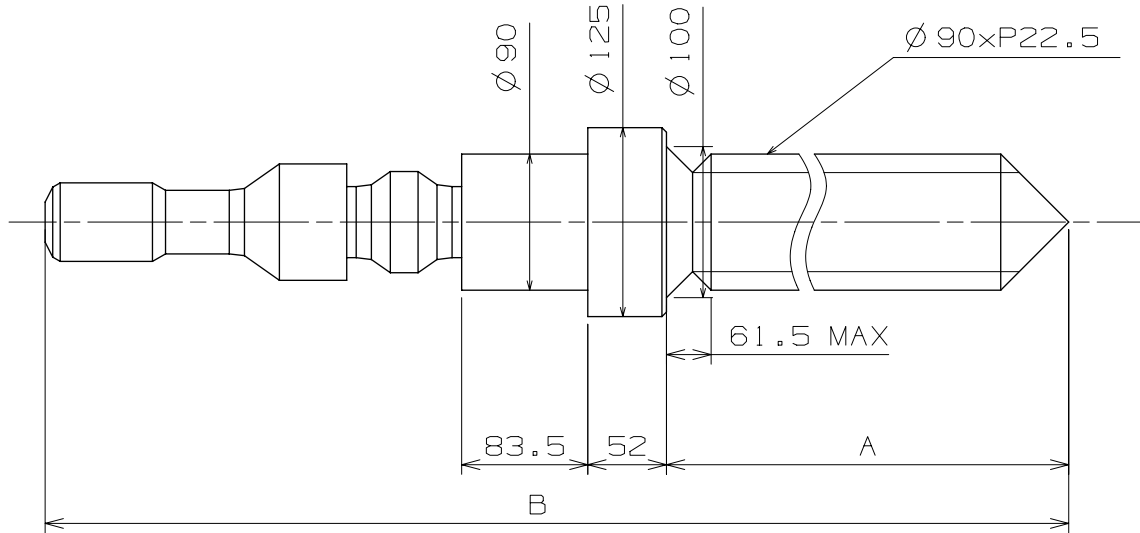


	A	B	C	D	E	E'	F	G	H	t1	t2	t3
TYPE M 一般針高	45	85	137	40	*	*	37	25	30	15	15	15

*	J		
	Max	800	800~850
E'	Min 40	Min 45	Min 65
E	Min 48	Min 53	Min 73

Scale : 15/1  
 Unit : 1=1/100mm

Version:5



	Part. No.	A	B
TYPE A	0354 1220	1303	1714
TYPE B	0354 1270	1763	2174

Do not lubricate the hand setting stem.

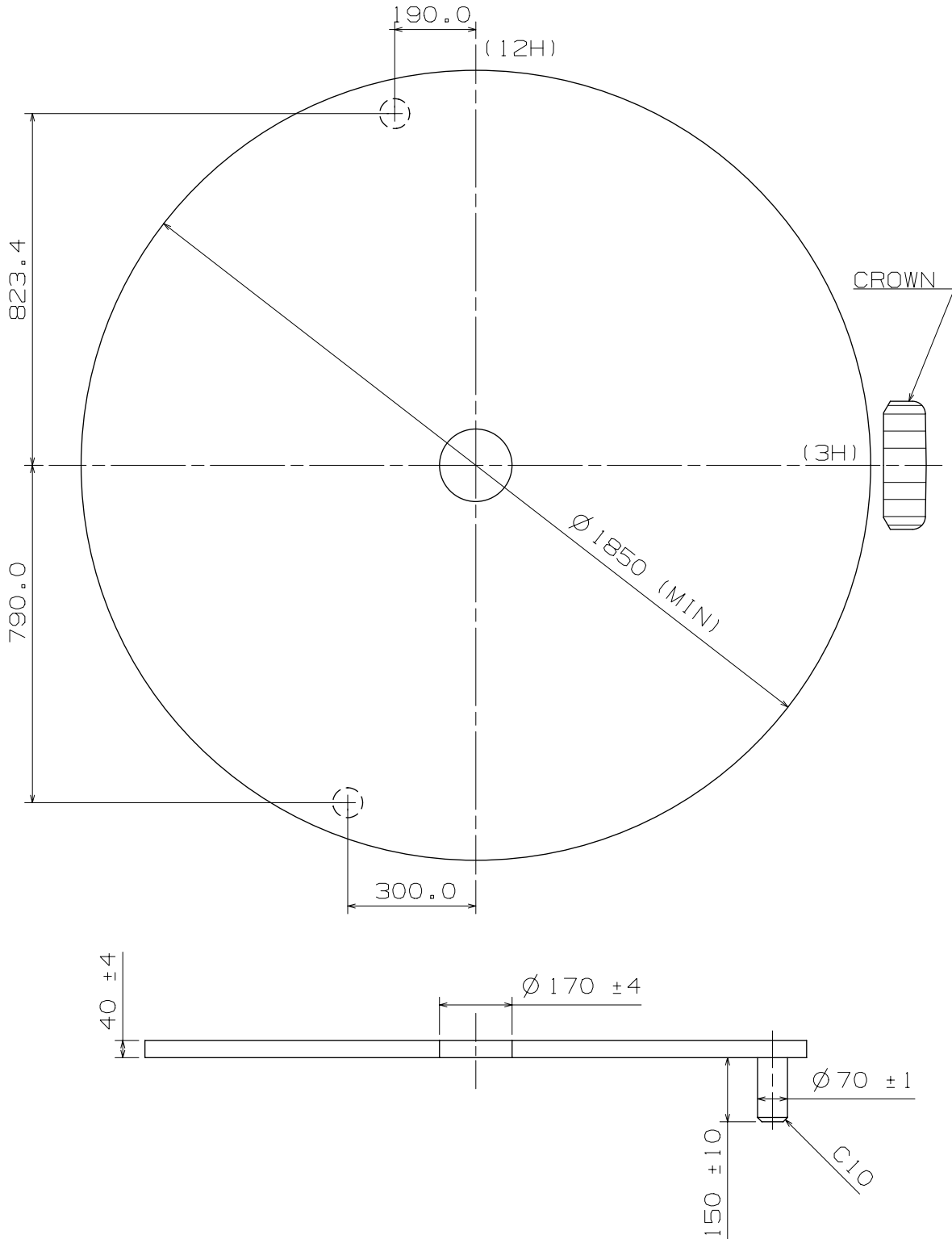
Scale : 20/1  
Unit : 1=1/100mm

Version:4



# Dial - 1

Cal. PC21S

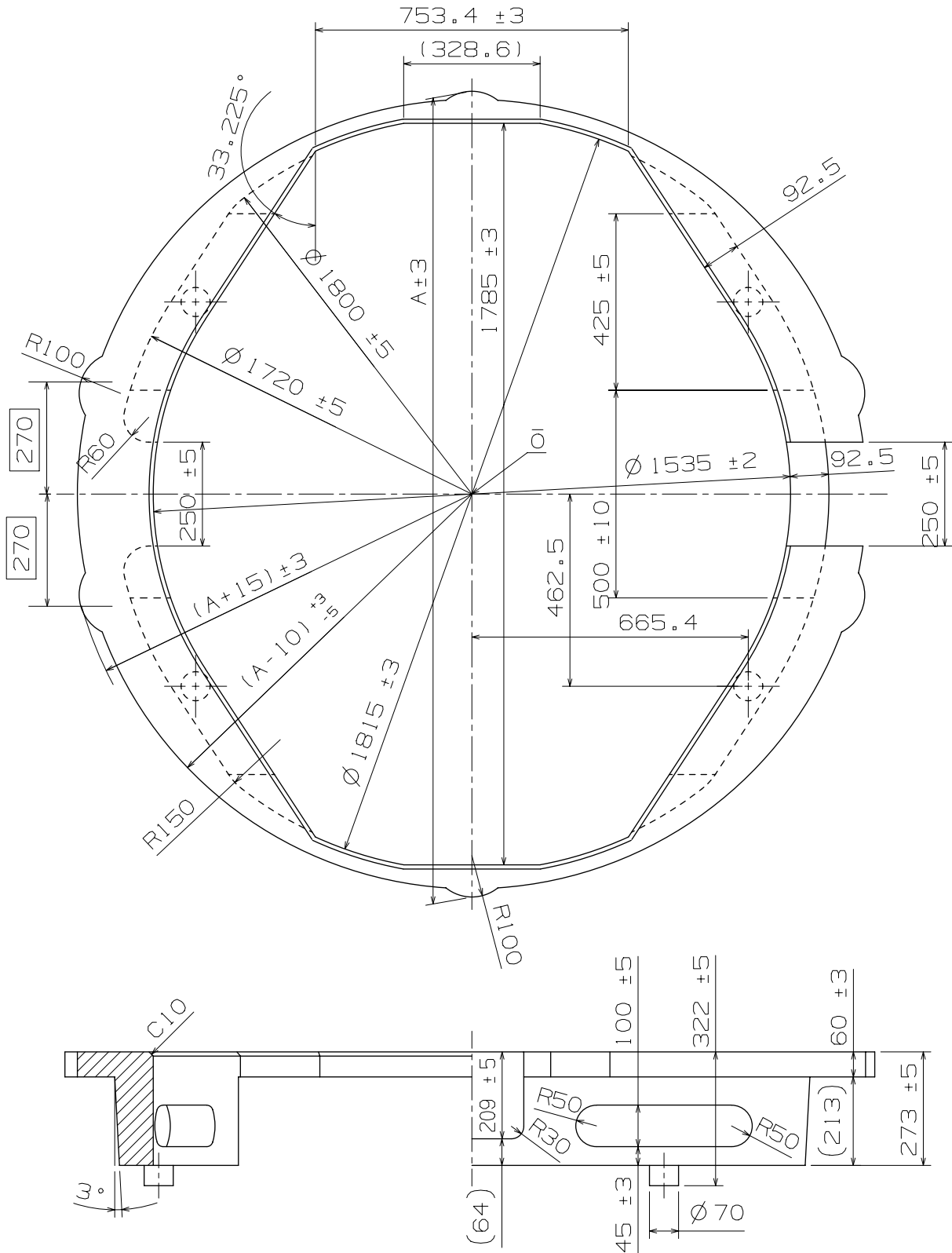


Scale : 7/1  
Unit : 1=1/100

Version:4

# Casing Ring

Cal. PC215

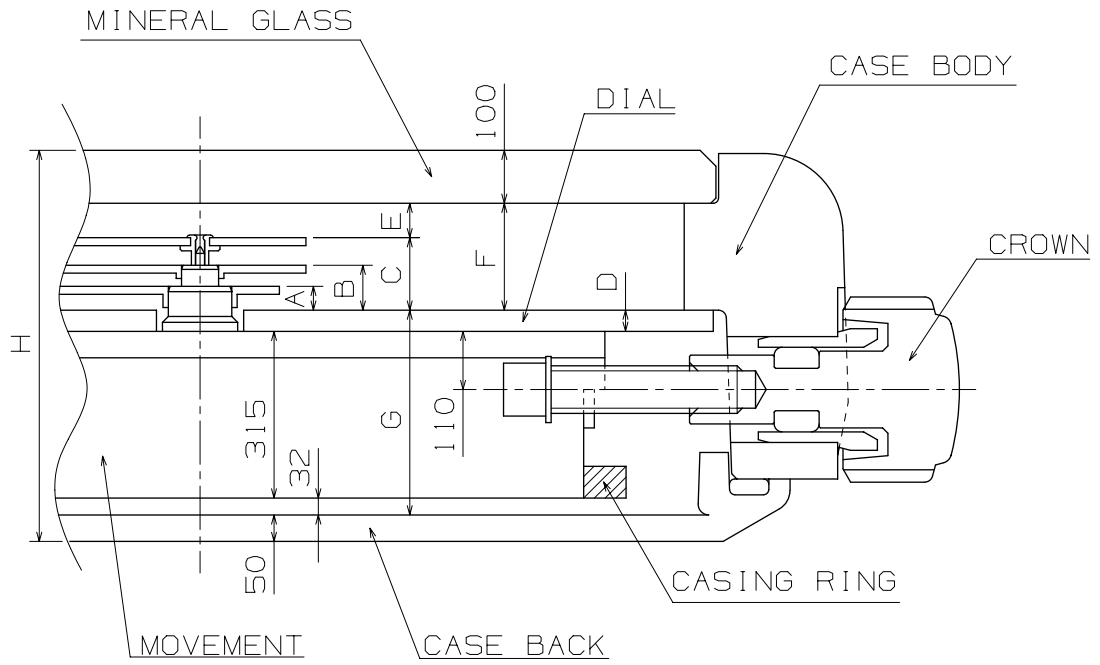


Scale : 7/1  
Unit : 1=1/100

Version:4

# Assembly Plan

Cal. PC215

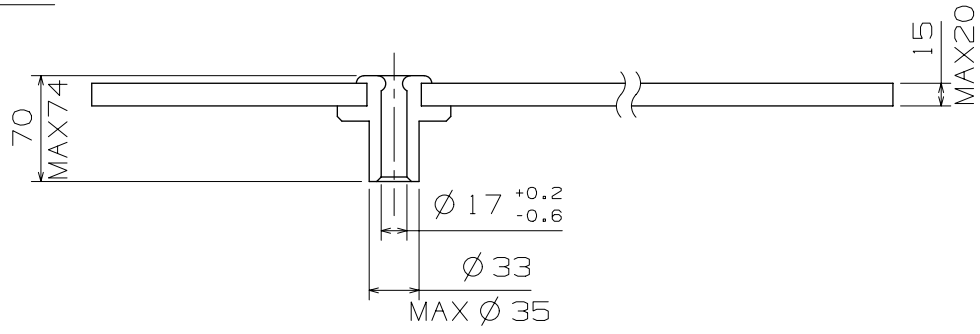


	A	B	C	D	E	F	G	H
TYPE M	45	85	137	40	65	202	387	739

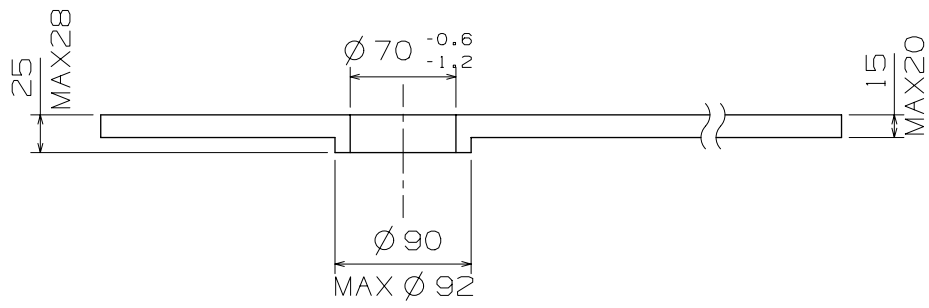
Scale :  $\neq$   
Unit : 1=1/100

Version:4

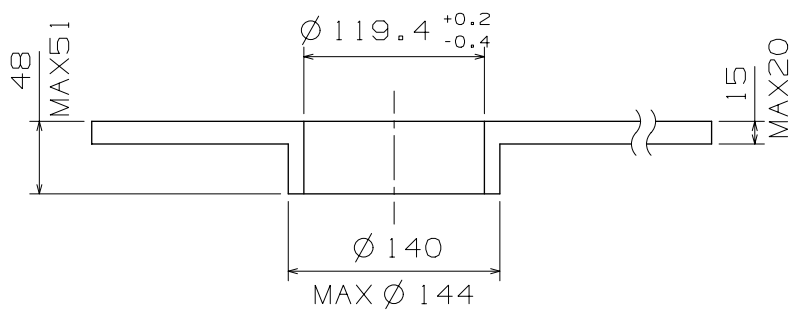
SECOND



MINUTE



HOUR



Scale : 20/1

Unit : 1=1/100

Version:4