

Cal. VD57B

ϕ 29.50 mm

H 4.57 mm

Item	Version No.
Specification - 1	Version 6
Specification - 2	Version 1
Appearance	Version 8
Casing	Version 9
Hand Fitting - 1	Version 9
Hand Fitting - 2	Version 1
Hand Setting Stem	Version 8
Dial - 1	Version 2
Dial - 2	Version 2
Dial - 3	Version 1
Dial - 4	Version 1
Dial - 5	Version 1
Assembly Plan - 1	Version 5
Assembly Plan - 2	Version 5
Assembly Plan - 3	Version 1
Assembly Plan - 4	Version 1
Hands	Version 4



MOVEMENT SPECIFICATION - 1

CAL.VD57B 12 3 / 4 Ligne Quartz Movement

Three Hands with 3 Eyes / Date (Minute, Second, 1 / 10 Second Chronograph & Calendar)

1. MOVEMENT DIMENSIONS

- Outside diameter ϕ 29.50mm (12H~6H) x 26.00mm (3H~9H)
- Casing diameter ϕ 28.80mm (12H~6H)
- Total height 4.57 mm
- Dimensions of small hands away from center 7.50 mm

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
 - Second : Less than 0.09 μ N·m (9mg·mm)
 - Minute : Less than 0.60 μ N·m (60mg·mm)
 - Hour : Less than 0.50 μ N·m (50mg·mm)
 - Chronograph hands : Less than 0.05 μ N·m (5mg·mm)
- The moment of inertia 1/10 chronograph hand : Less than 0.40 μ g·m² (400mg·mm²) (Disc hand)
- Additional function Stopwatch : up to 1 minute in 1/10 second (2 seconds per round)
up to 60 minutes in 1 second split time

3. BATTERY

- Type Silver oxide battery
- Size ϕ 9.5 x t 2.0 (mm)
- Battery life Approx. 2 years
- Recommended battery SR920SW (SEIZAIKEN)

4. STEPPING MOTOR

- Number of units 3 pieces
- 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. 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

10. ATTACHED PARTS

Parts Name	Parts Code
Hand setting stem	0351-1770 (Normal) / 0351-1220 (Long)
Silver oxide battery	3013 - 14G0
Sticker	0110 - 3570

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

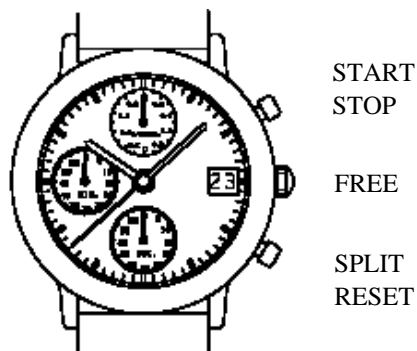
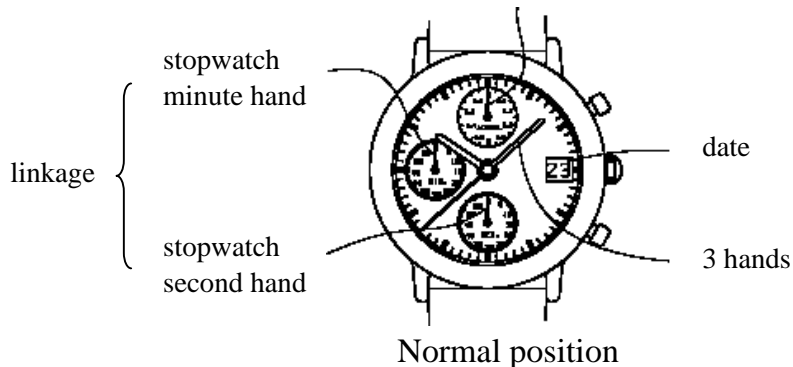
Movement Specification - 2

CAL. VD57B

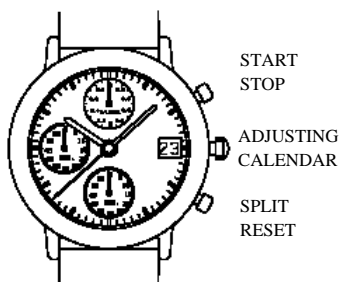
OPERATION

3 step motors (3 hands with calendar, 1 / 10 sec. chrono. maximum to 60 minutes)

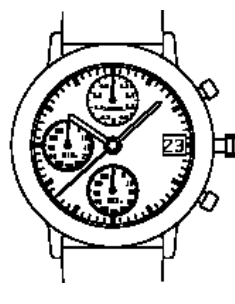
Press button A, stopwatch 1/10 sec. hand indicates 1/10 unit of measurement time during stopwatch 1/10 second hand moves for a first minute.



1st click
adjusting calendar
(clockwise)



2nd click
adjusting minute, hour & chrono. hands

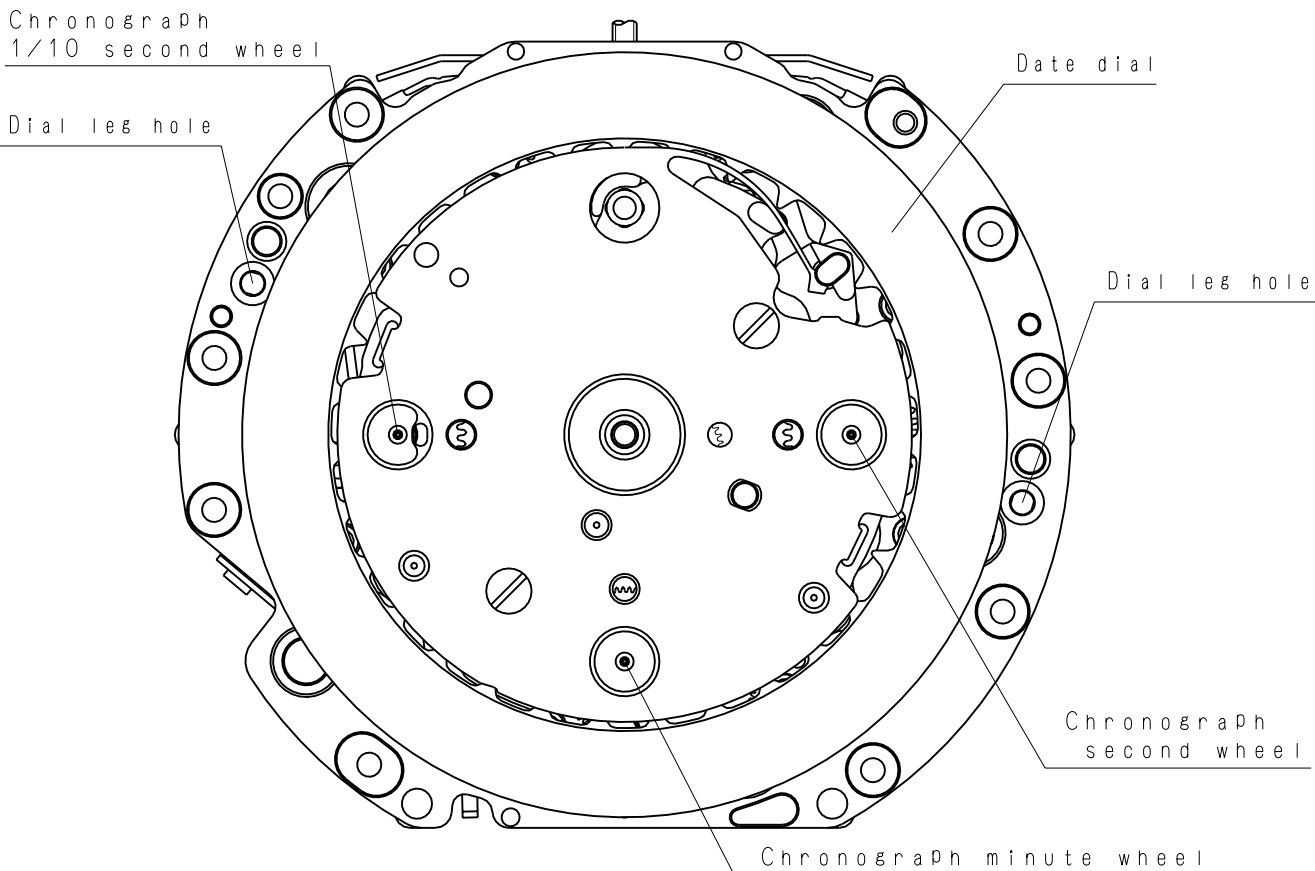
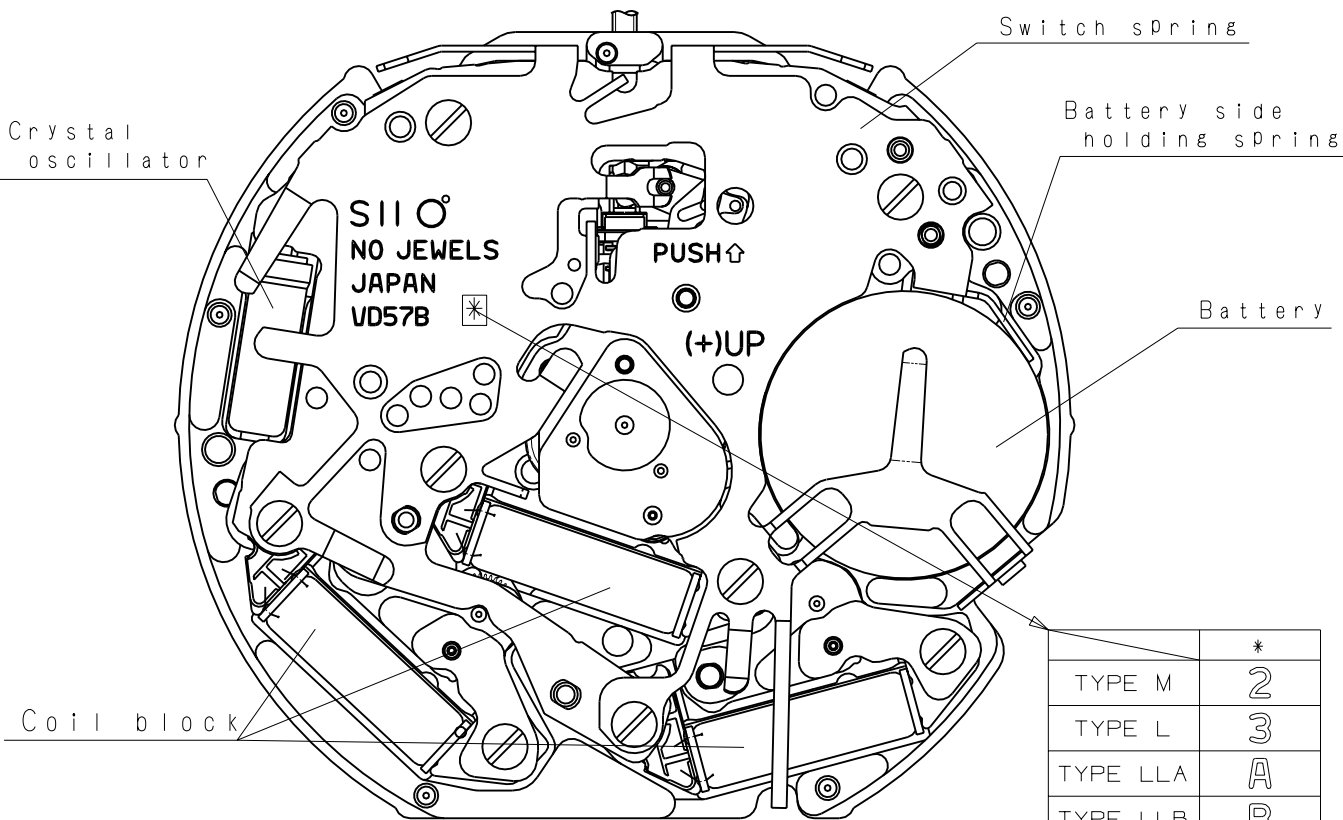


AC FUNCTIONS

(KEEP
BUTTONS
"A" AND "B"
PRESSED AT
THE SAME TIME
FOR 2 SECONDS,
AND THEN,
RELEASE THE
BUTTONS)

- * Stopwatch 1/10 second hand moves for a first minute.
- * Pull the crown to 2nd click to adjust the stopwatch hand position.
- * AC functions is available if stopwatch hand position is disorderly.
- * When using AC functions, stopwatch hand moves back and returned to where it was (second hand moves 1/2 circle counterclockwise and 1/2 circle clockwise, 1/10 second hand moves 1 circle clockwise)

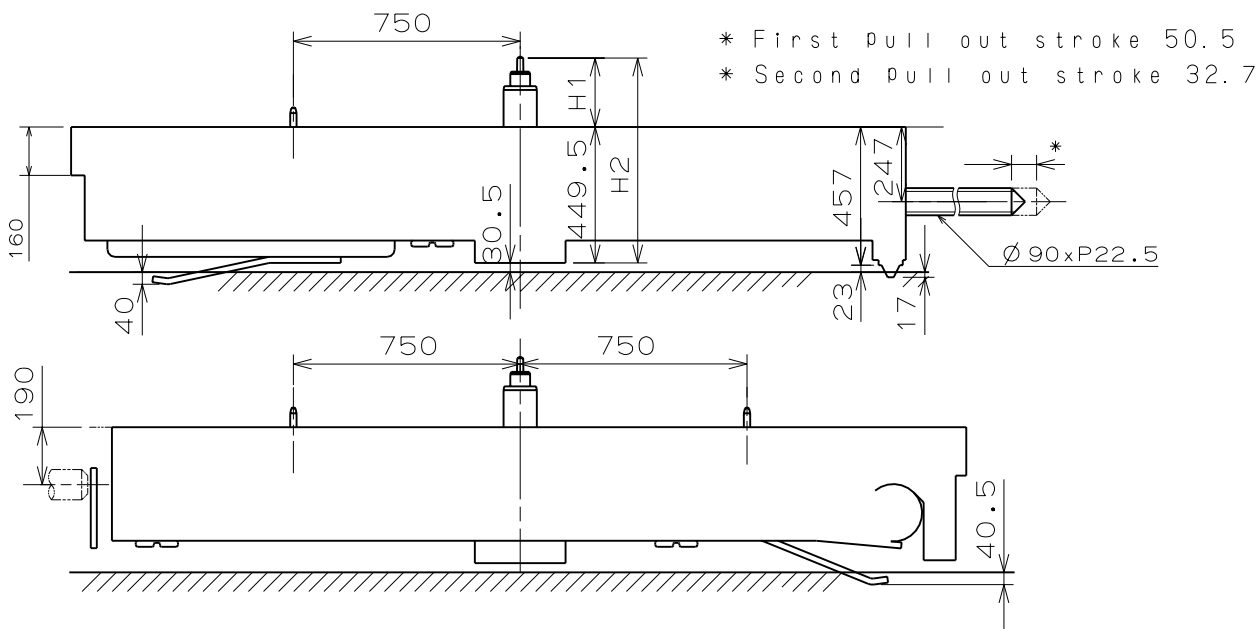
Version 1



Scale : 4/1

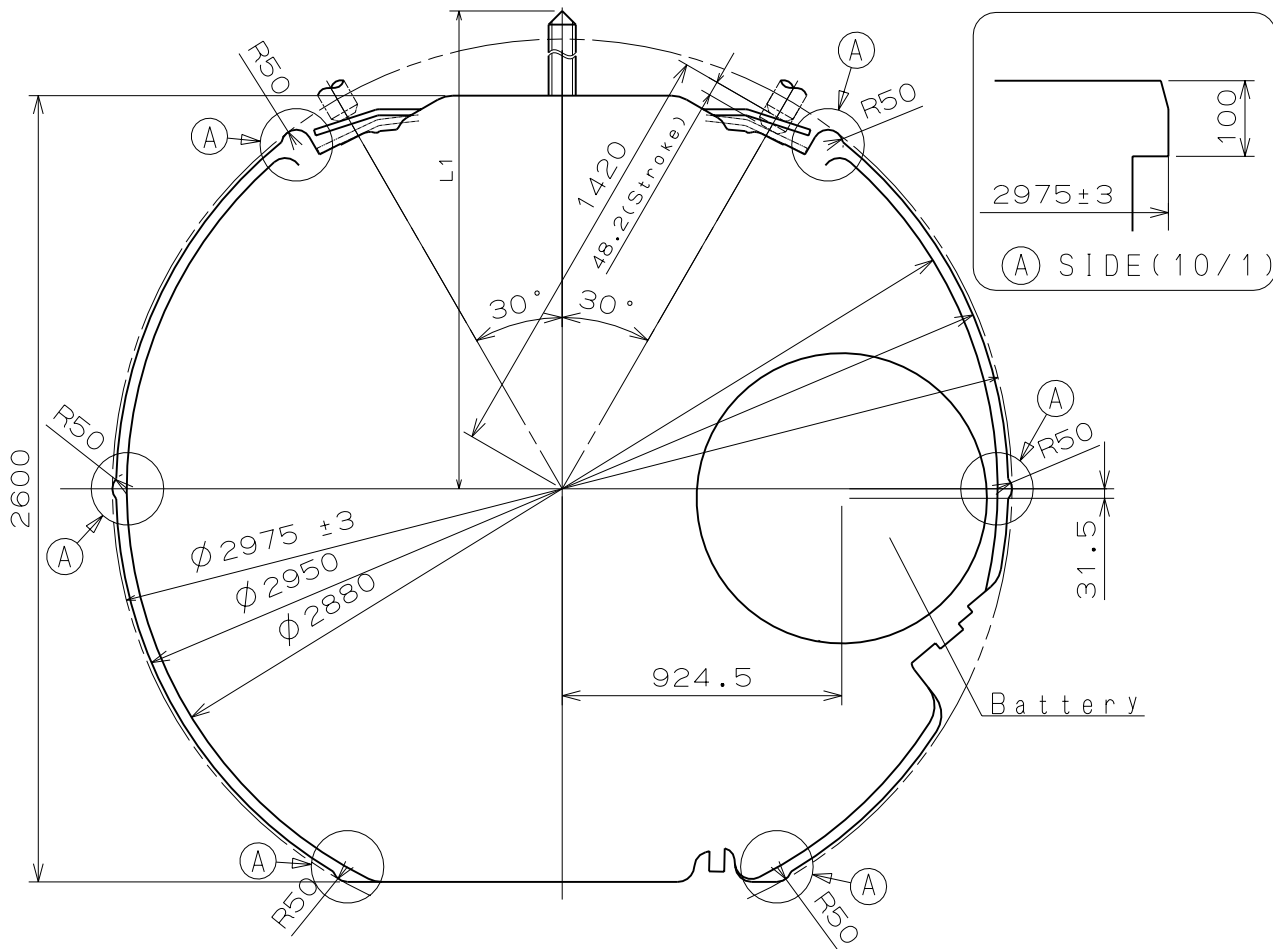
Version : 8

Unit : 1 = 1/100mm



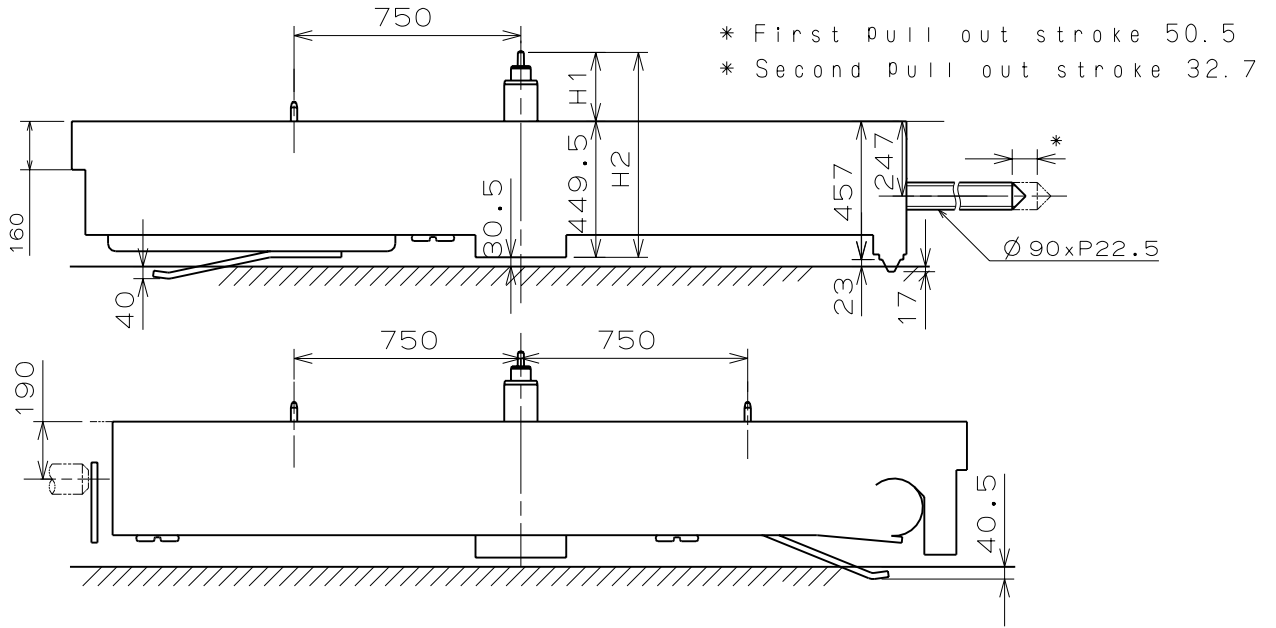
Center Post		TYPE M	TYPE L	TYPE LLA/LLB
Maximum height from main Plate surface	H1	228	273	354
Total height incl. movement	H2	677.5	722.5	803.5

Hand Setting Stem	TYPE A	TYPE B
L1	2285	2861



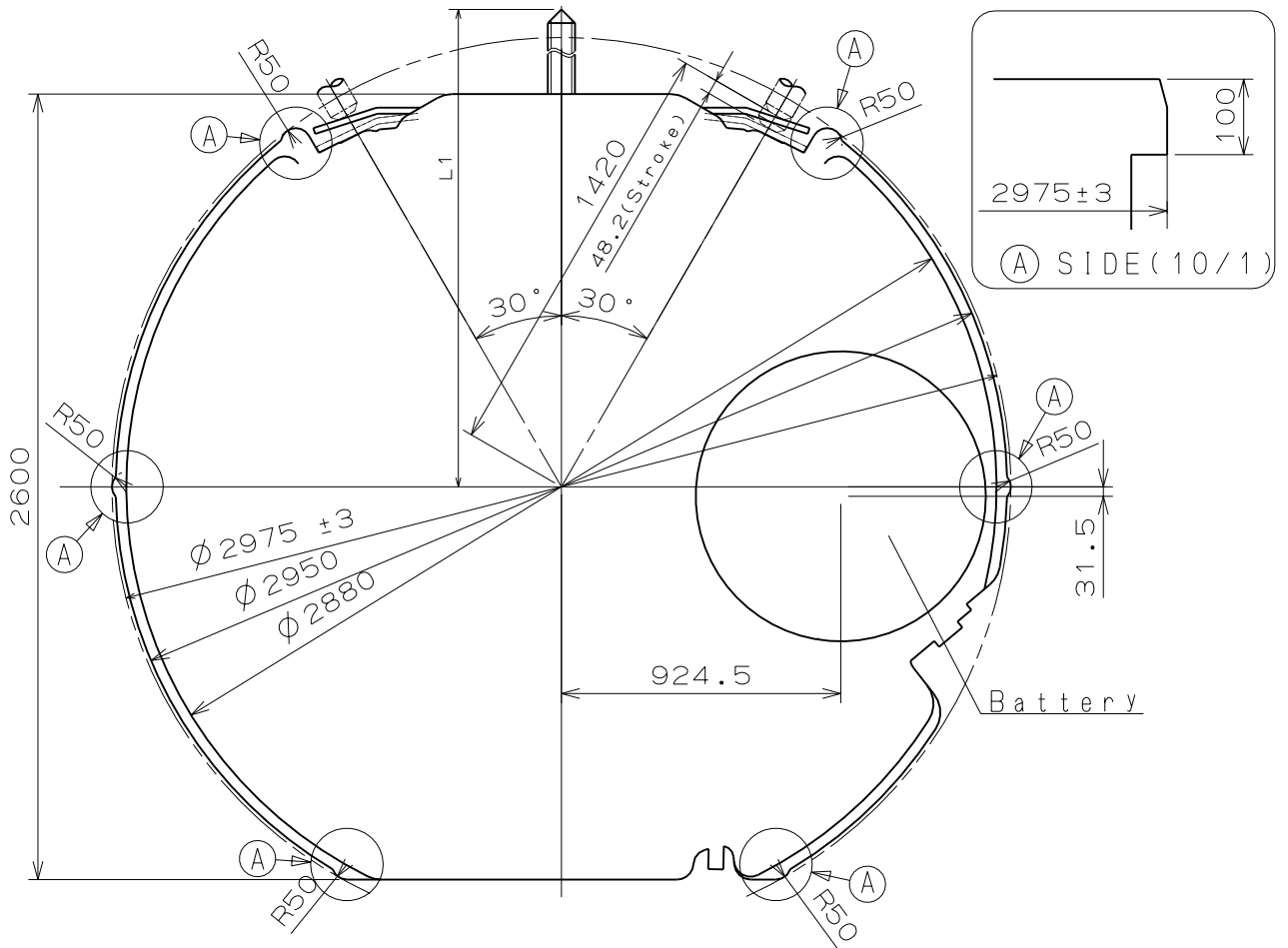
Scale : 4/1
Unit : 1=1/100mm

Version:9



Center post		Type M 一般針高	Type L 高針	Type LLA/LLB 特高針A特高針B
Maximum height from main plate surface 與機芯平面之最大高度	H1	228	273	354
Total height incl. movement 機芯總高度	H2	677.5	722.5	803.5

Hand Setting Stem	TYPE A	TYPE B
L1	2285	2861



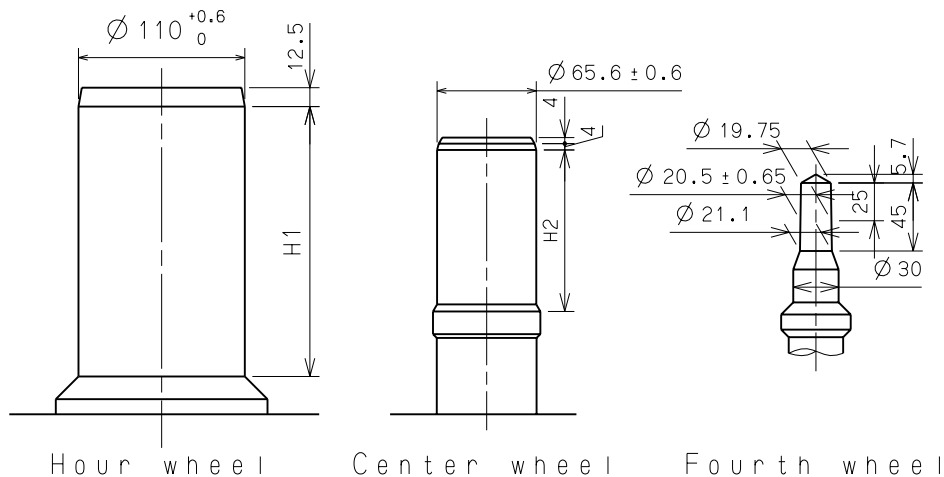
Scale : 4/1
Unit : 1=1/100mm

Version:9

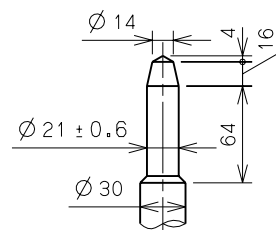
- *Unbalance
 - Hour hand $\leq 0.5 \mu\text{N} \cdot \text{m} (50\text{mg} \cdot \text{mm})$
 - Minute hand $\leq 0.6 \mu\text{N} \cdot \text{m} (60\text{mg} \cdot \text{mm})$
 - Second hand $\leq 0.09 \mu\text{N} \cdot \text{m} (9\text{mg} \cdot \text{mm})$
 - Chronograph hand $\leq 0.05 \mu\text{N} \cdot \text{m} (5\text{mg} \cdot \text{mm})$
- *Movement of inertia
 - 1/10 Chronograph hand $\leq 0.4 \mu\text{g} \cdot \text{m}^2 (400\text{mg} \cdot \text{mm}^2)$ (Disc hand available)

TYPE M/L

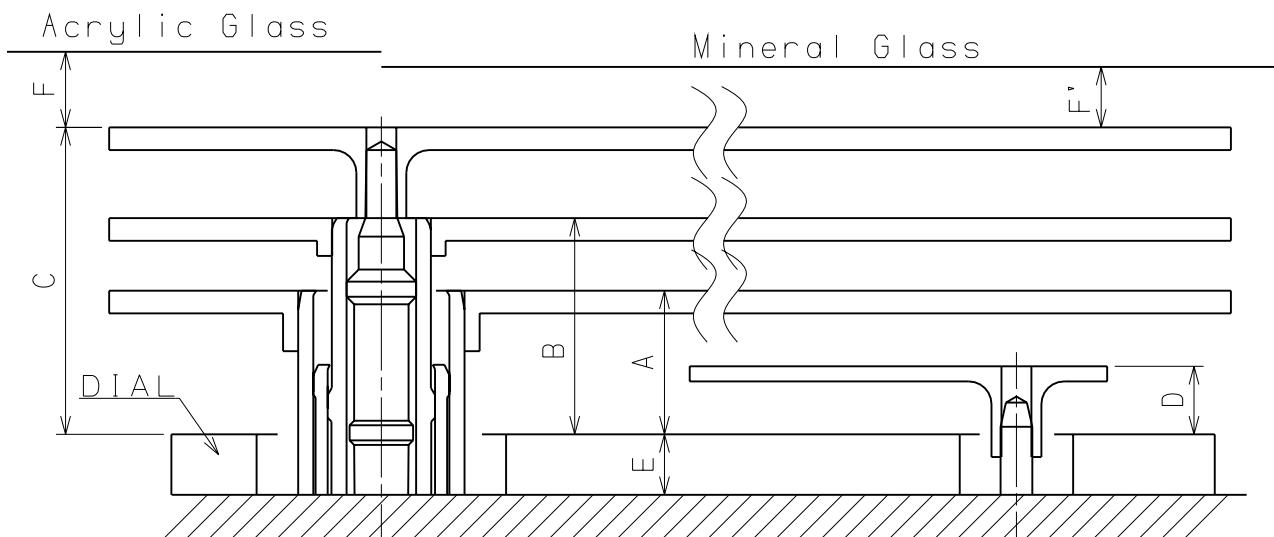
	H1	H2
TYPE M	178.5	109
TYPE L	223.5	154



Part name	Part No.	
	TYPE M	TYPE L
Hour wheel	0271 4070	0273 0370
Center wheel	0221 1570	0221 0780
Fourth wheel	0241 1780	0241 4890
Chronograph minute wheel	0902 0080	0902 0040
Chronograph second wheel	0888 0090	0888 0110
Chronograph 1/10 second wheel	0888 0090	0888 0110



Chronograph minute wheel
Chronograph second wheel
Chronograph 1/10 second wheel



	A	B	C	D	E	F	F'
TYPE M	95	143	203	45	40	50	40
TYPE L	95	143	203	45	85	50	40

Scale : 20/1

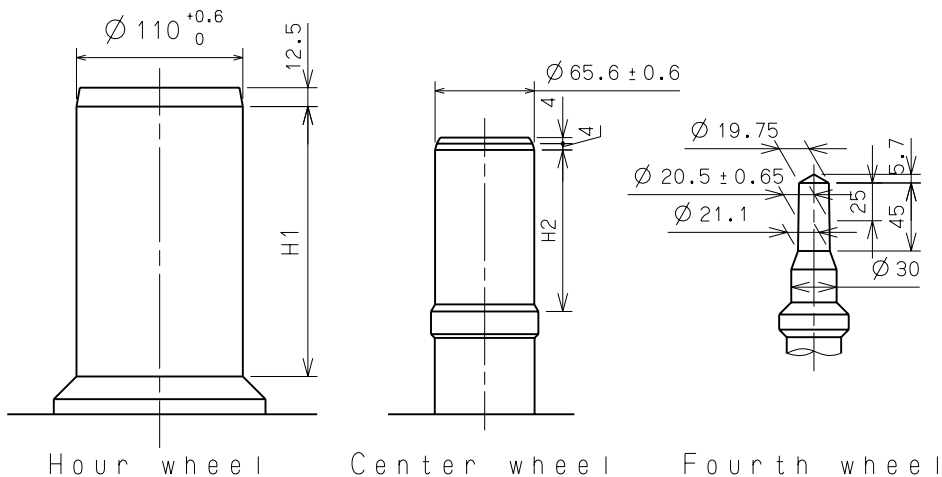
Version : 9

Unit : 1 = 1/100mm

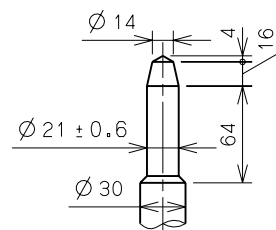
- *Unbalance
 - Hour hand $\leq 0.5 \mu\text{N} \cdot \text{m} (50\text{mg} \cdot \text{mm})$
 - Minute hand $\leq 0.6 \mu\text{N} \cdot \text{m} (60\text{mg} \cdot \text{mm})$
 - Second hand $\leq 0.09 \mu\text{N} \cdot \text{m} (9\text{mg} \cdot \text{mm})$
 - Chronograph hand $\leq 0.05 \mu\text{N} \cdot \text{m} (5\text{mg} \cdot \text{mm})$
- *Movement of inertia
 - 1/10 Chronograph hand $\leq 0.4 \mu\text{g} \cdot \text{m}^2 (400\text{mg} \cdot \text{mm}^2)$ (Disc hand available)

TYPE M/L

	H1	H2
TYPE M 一般針高	178.5	109
TYPE L 高針	223.5	154



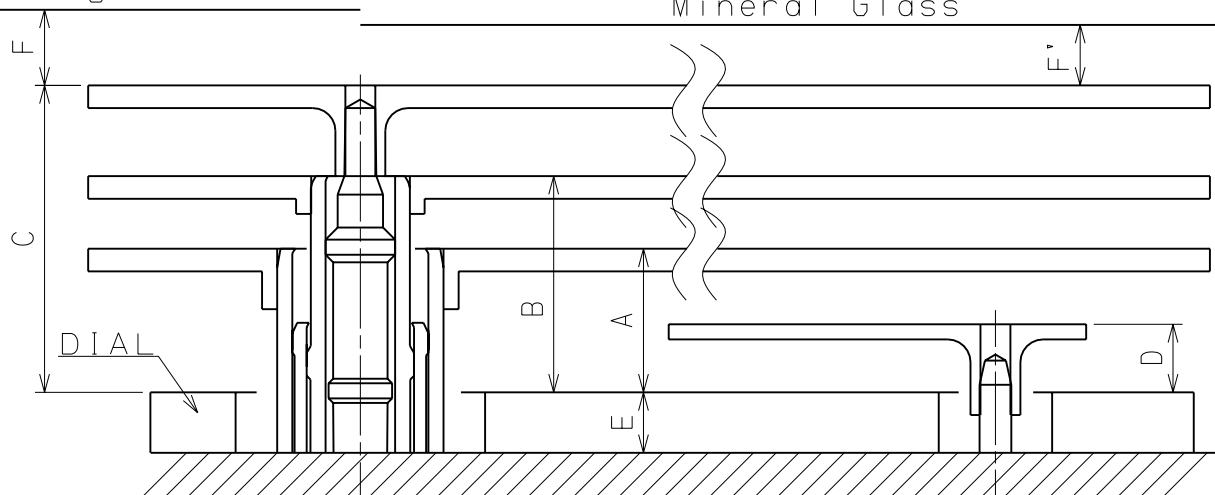
Part name	Part No.	
	TYPE M 一般針高	TYPE L 高針
Hour wheel 時針輪	0271 4070	0273 0370
Center wheel 分針輪	0221 1570	0221 0780
Fourth wheel 秒針輪	0241 1780	0241 4890
Chronograph minute wheel 計時分輪	0902 0080	0902 0040
Chronograph second wheel 計時秒輪	0888 0090	0888 0110
Chronograph 1/10 second wheel 計時1/10秒針輪	0888 0090	0888 0110



Chronograph minute wheel
Chronograph second wheel
Chronograph 1/10 second wheel

Acrylic Glass

Mineral Glass



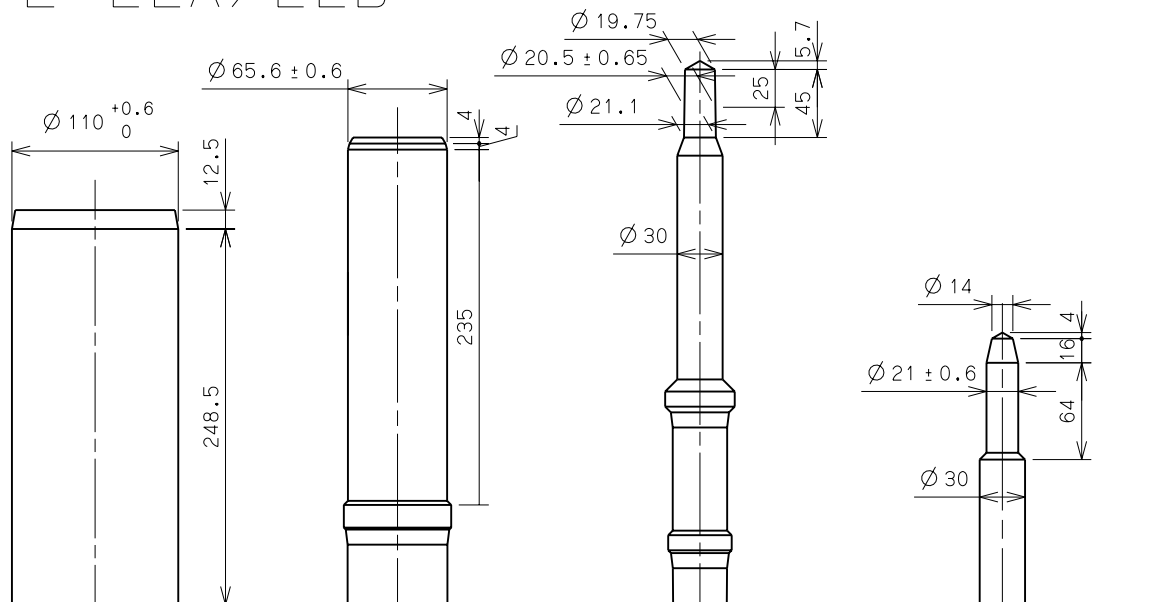
	A	B	C	D	E	F	F'
TYPE M 一般針高	95	143	203	45	40	50	40
TYPE L 高針	95	143	203	45	85	50	40

Scale : 20/1

Version : 9

Unit : 1 = 1/100mm

TYPE LLA/LLB

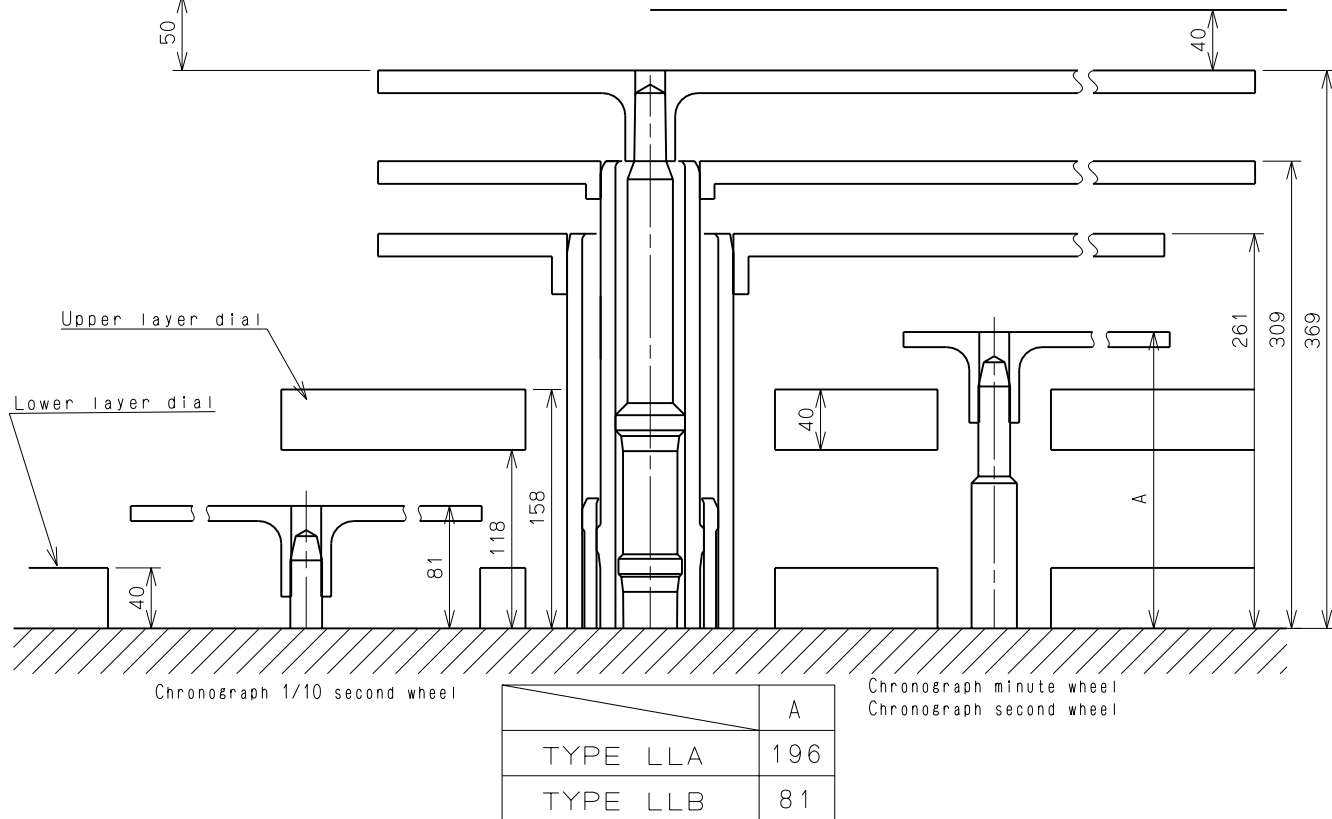


Hour wheel Center wheel Fourth wheel Chronograph minute wheel
 Chronograph second wheel
 Chronograph 1/10 second wheel

	Parts No.					
	Hour wheel	Center wheel	Fourth wheel	Chronograph minute wheel	Chronograph second wheel	Chronograph 1/10 second wheel
TYPE LLA	0273 1990	0221 1990	0144 1990	0902 1990	0888 1990	0888 0090
TYPE LLB				0902 0080	0888 0090	

Acrylic Glass

Mineral Glass



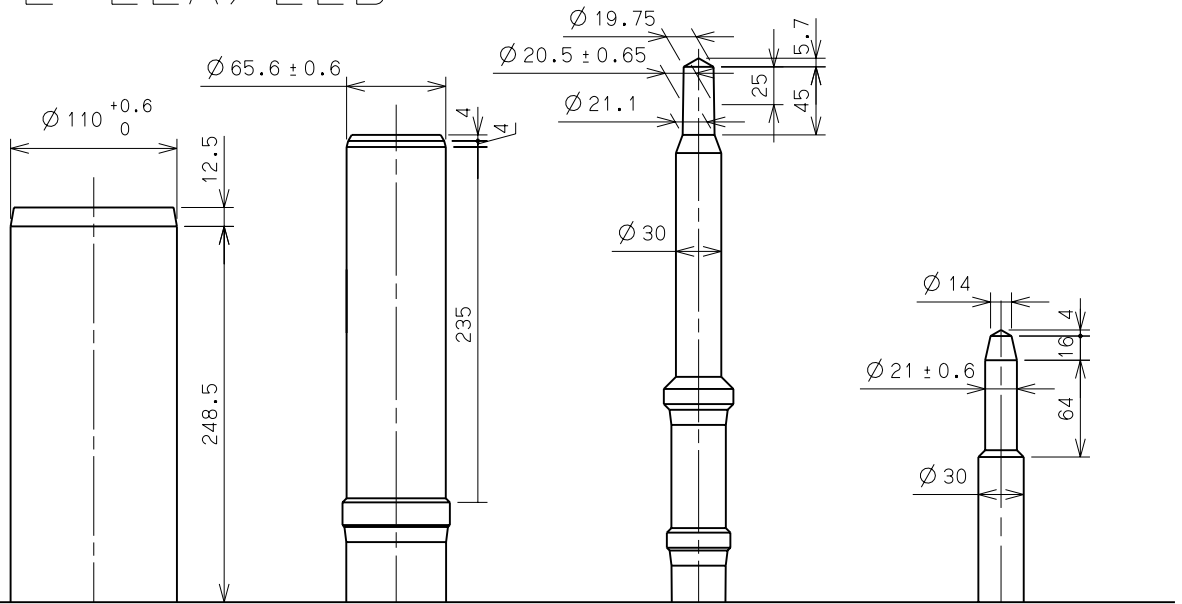
	A
TYPE LLA	196
TYPE LLB	81

Scale : 20/1

Version : 1

Unit : 1=1/100mm

TYPE LLA/LLB

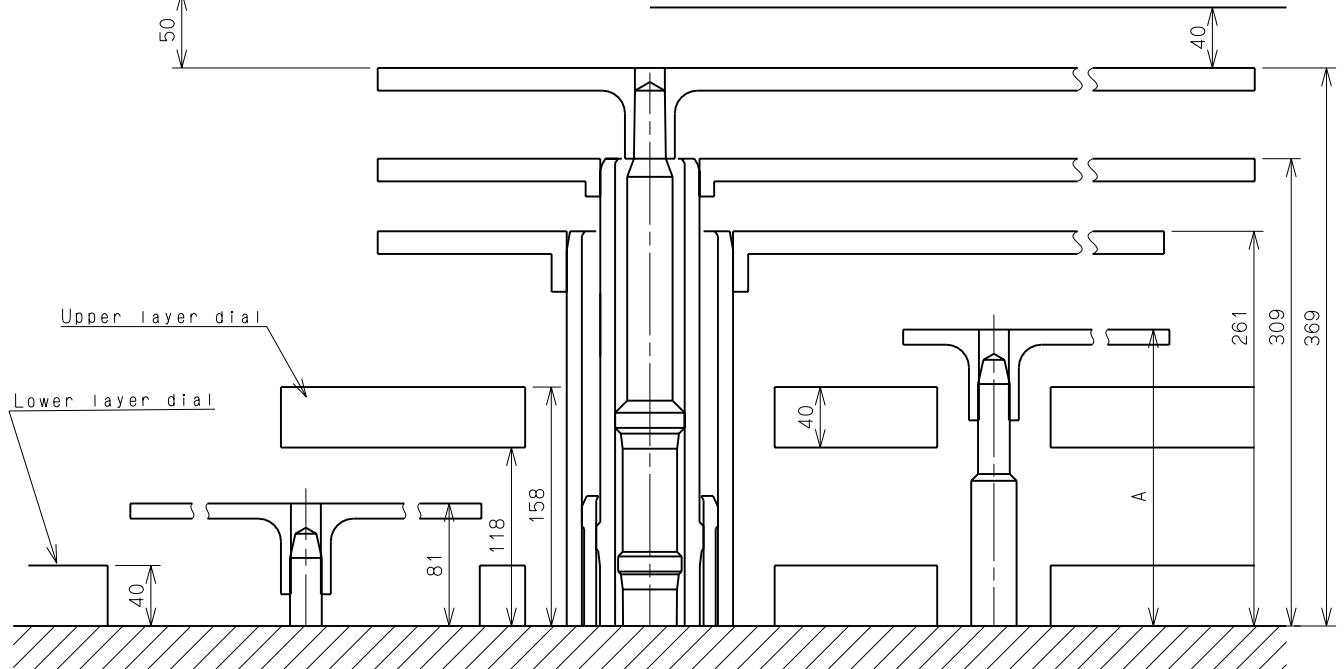


Hour wheel Center wheel Fourth wheel Chronograph minute wheel
 Chronograph second wheel
 Chronograph 1/10 second wheel

	Parts No.					
	Hour wheel 時針輪	Center wheel 分針輪	Fourth wheel 秒針輪	Chronograph minute wheel 計時分針輪	Chronograph second wheel 計時秒針輪	Chronograph 1/10 sec. wheel 1/10 時秒針輪
Type LLA 特高針A	0273 1990	0221 1990	0144 1990	0902 1990	0888 1990	0888 0090
Type LLB 特高針B				0902 0080	0888 0090	

Acrylic Glass

Mineral Glass



Chronograph 1/10 second wheel

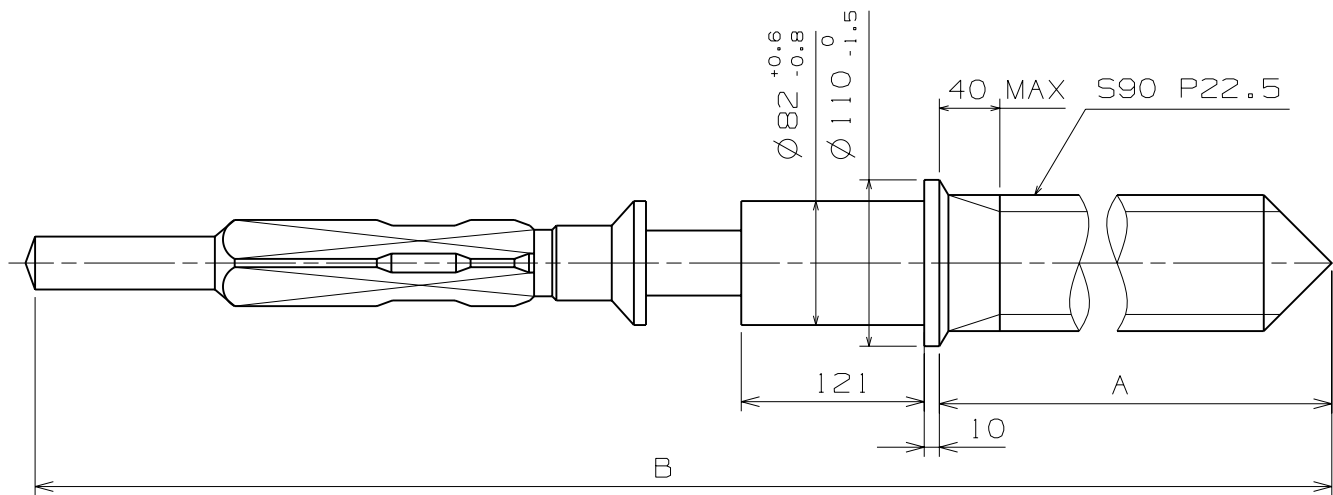
	A
Type LLA 特高針A	196
Type LLB 特高針B	81

Chronograph minute wheel
 Chronograph second wheel

Scale : 20/1

Version : 1

Unit : 1 = 1/100mm

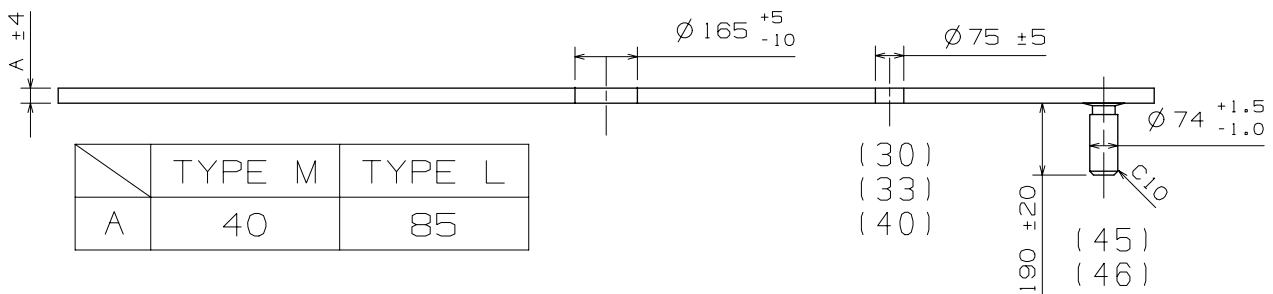
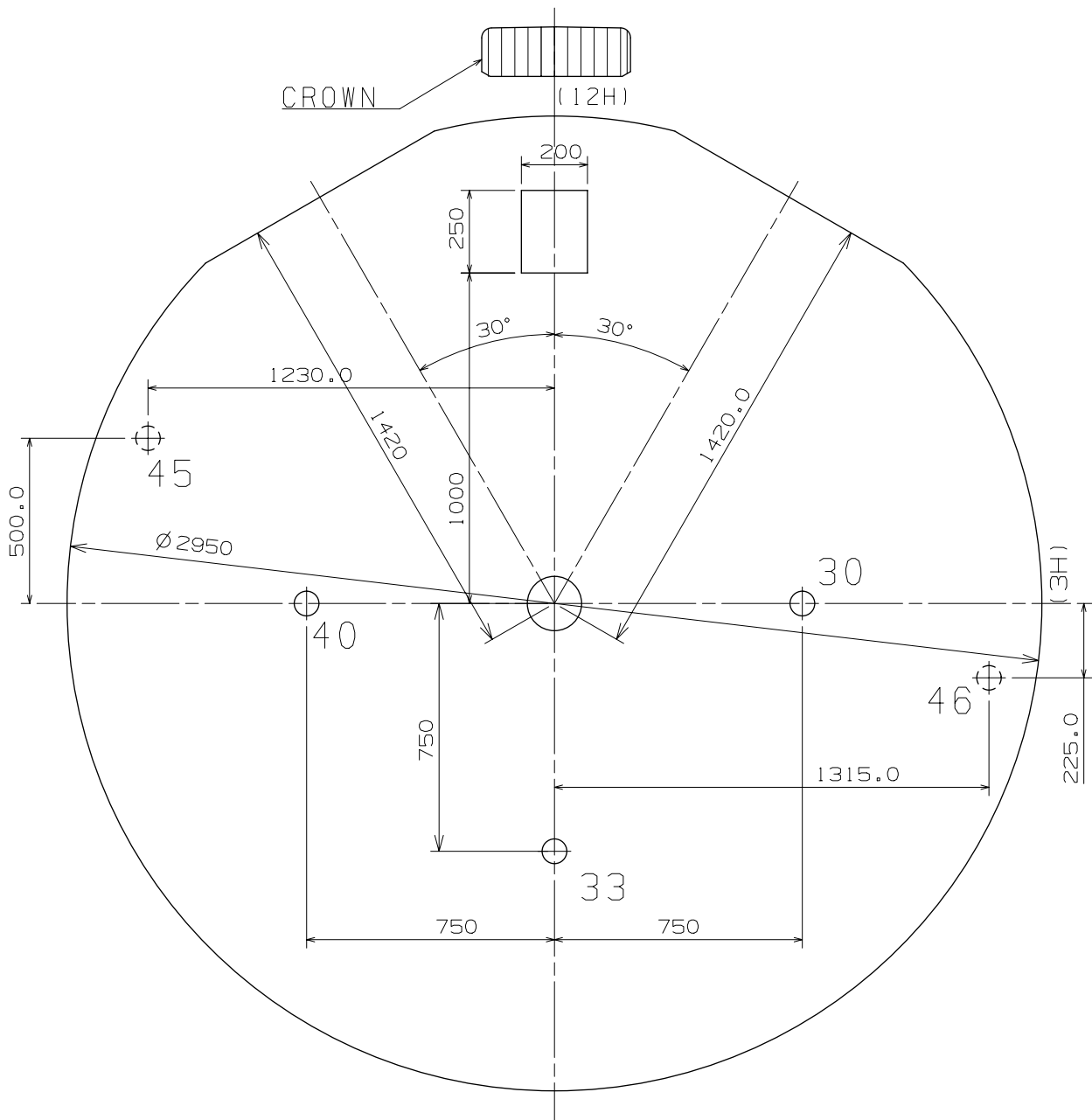


	Part. No.	A	B
TYPE A	0351 1770	1371	1969
TYPE B	0351 1220	1947	2545

Scale : 20/1

Unit : 1=1/100mm

Version:8

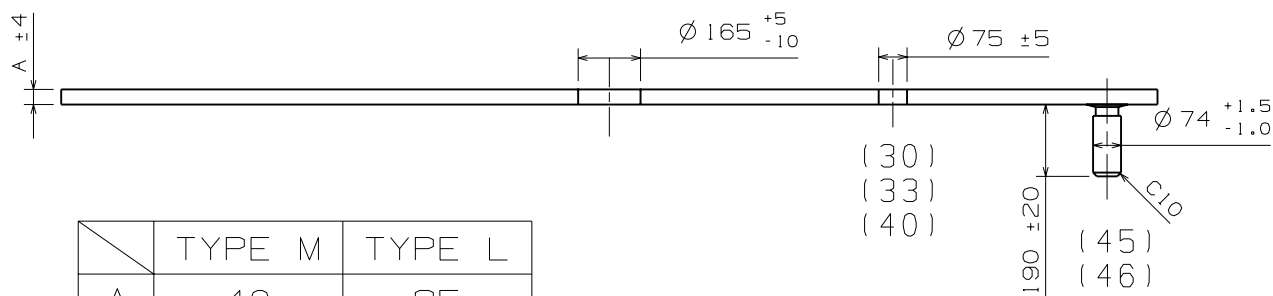
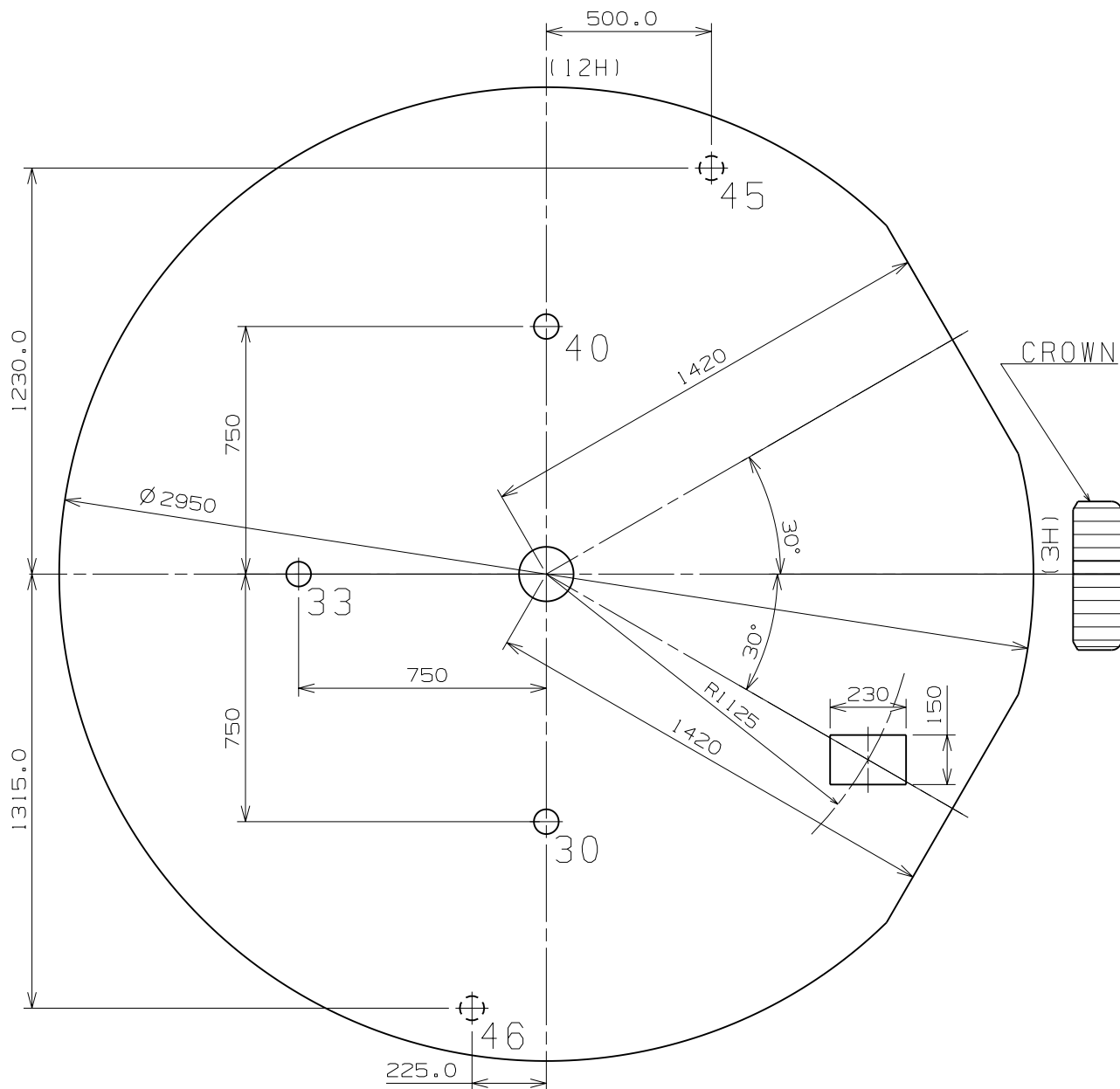


	TYPE M	TYPE L
A	40	85

Scale : 5/1

Unit : 1=1/100mm

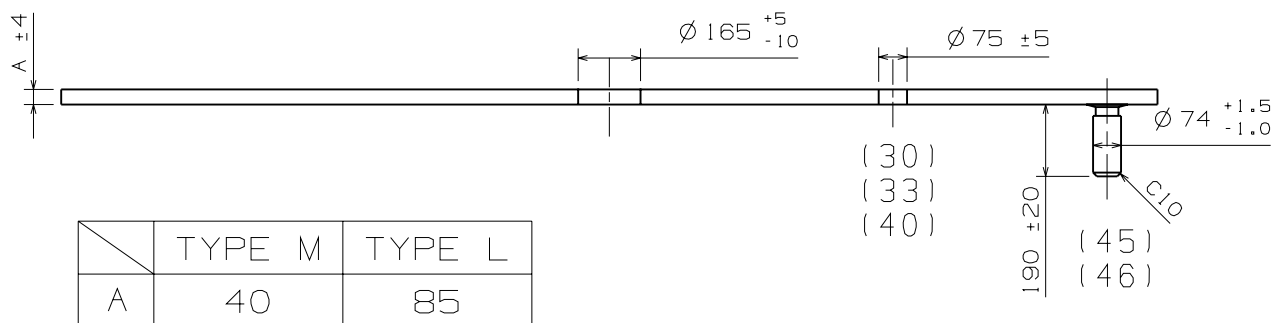
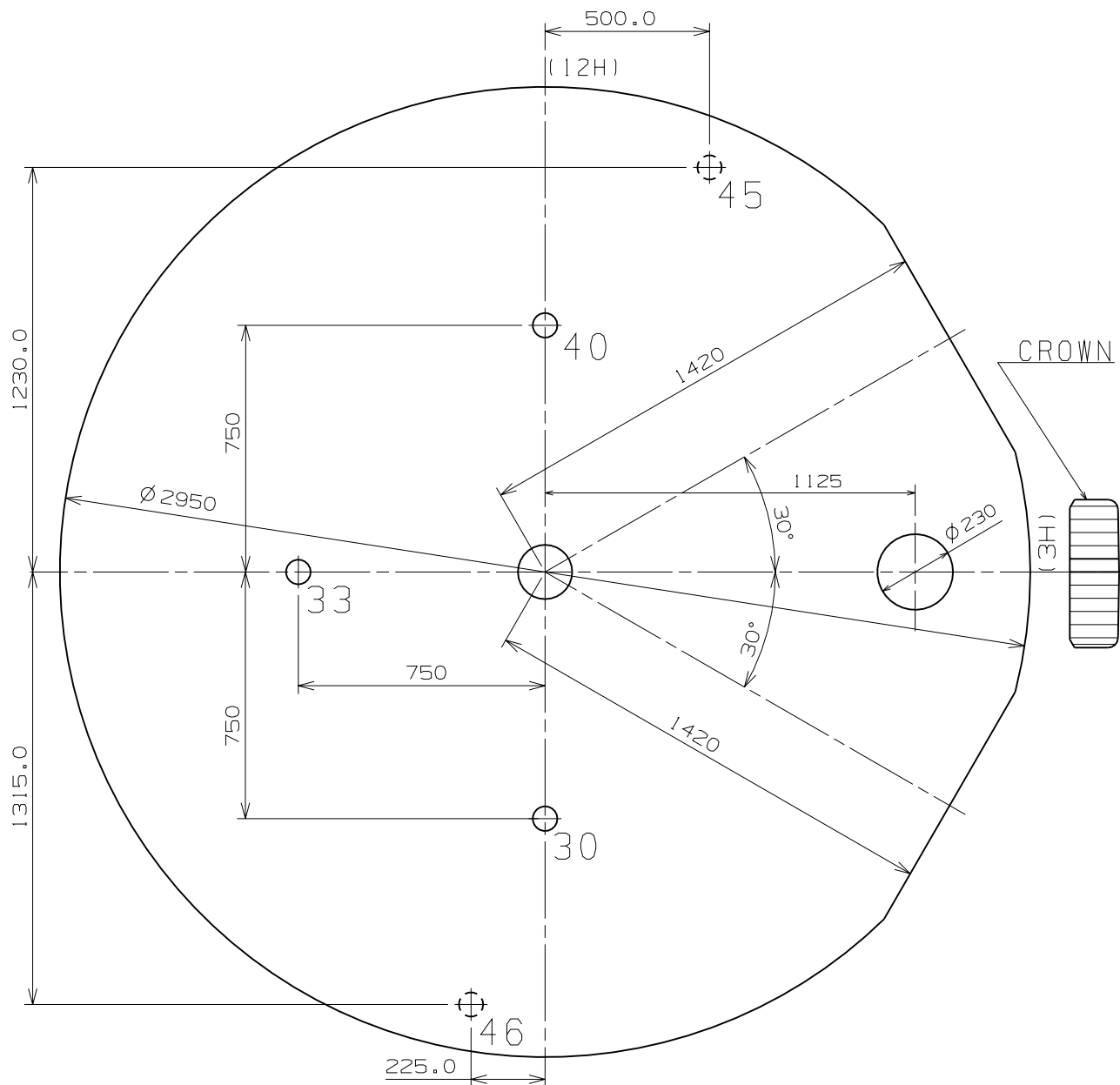
Version:2



	TYPE M	TYPE L
A	40	85

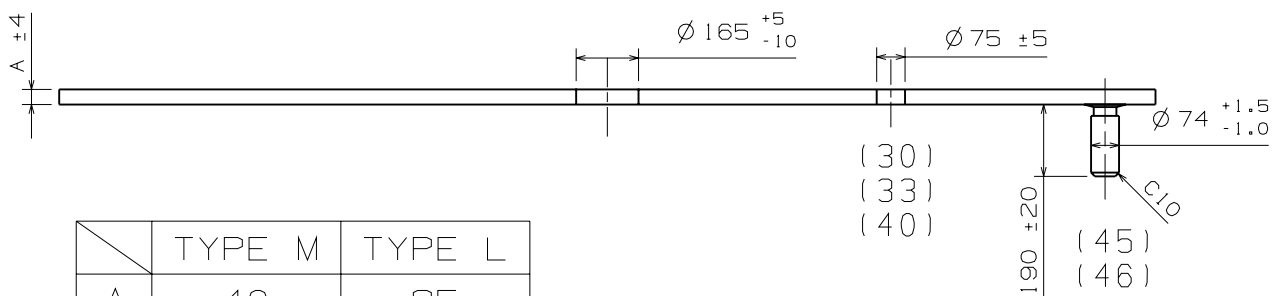
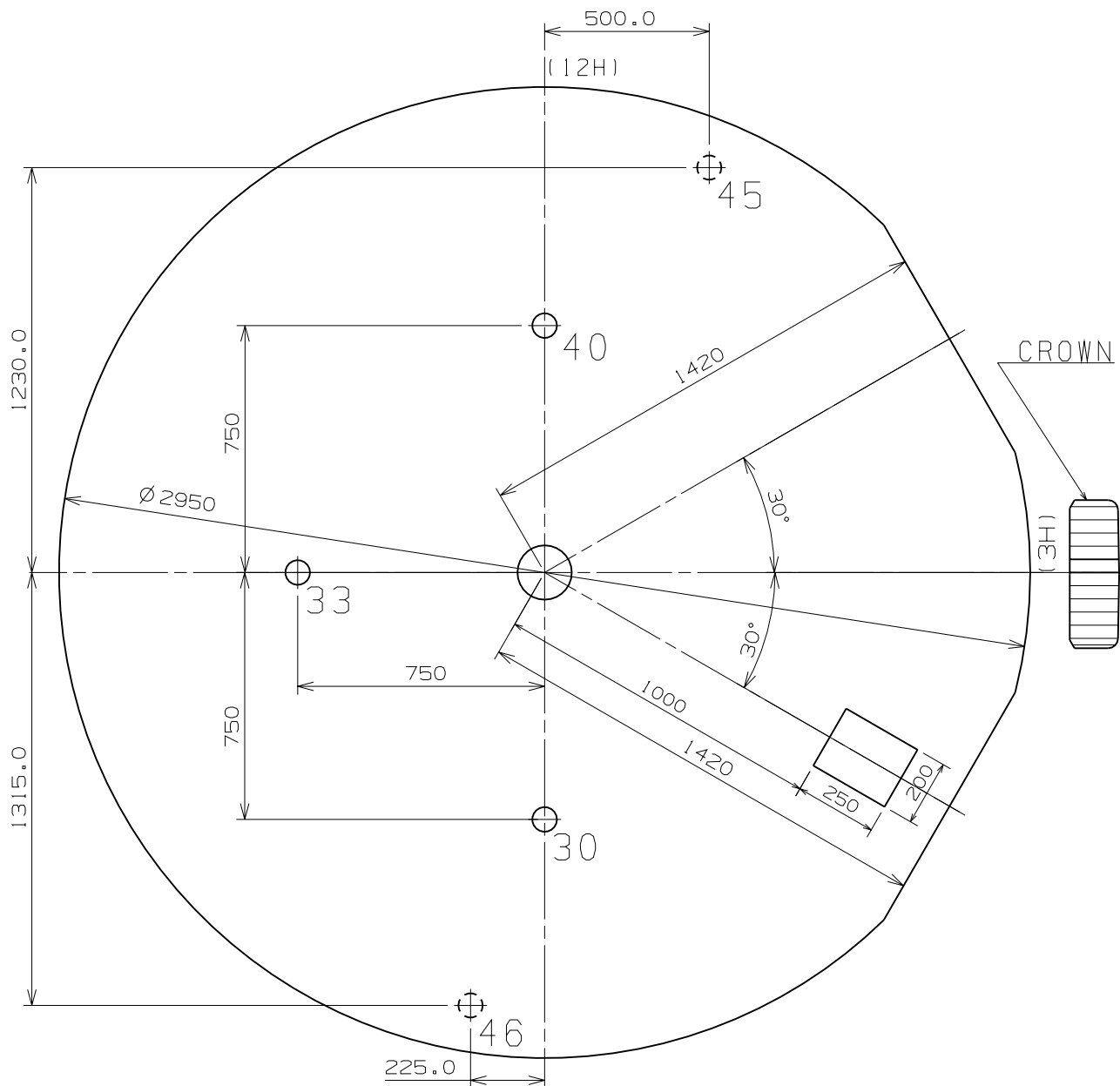
Scale : 5/1
Unit : 1=1/100mm

Version:1



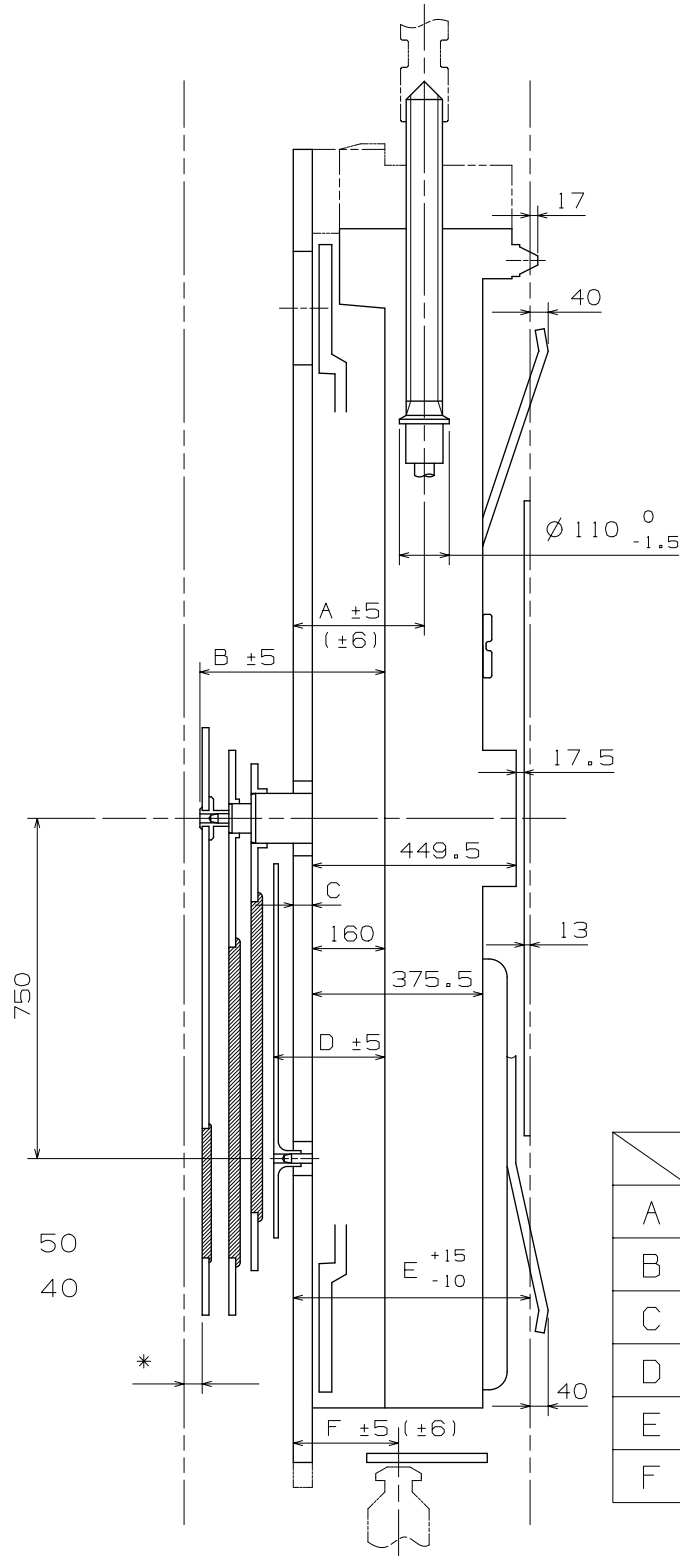
Scale : 5/1
Unit : 1=1/100mm

Version:1



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

Version:1

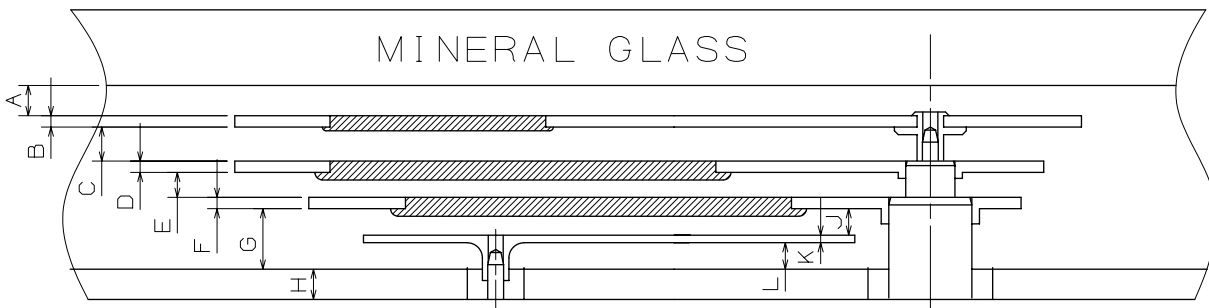
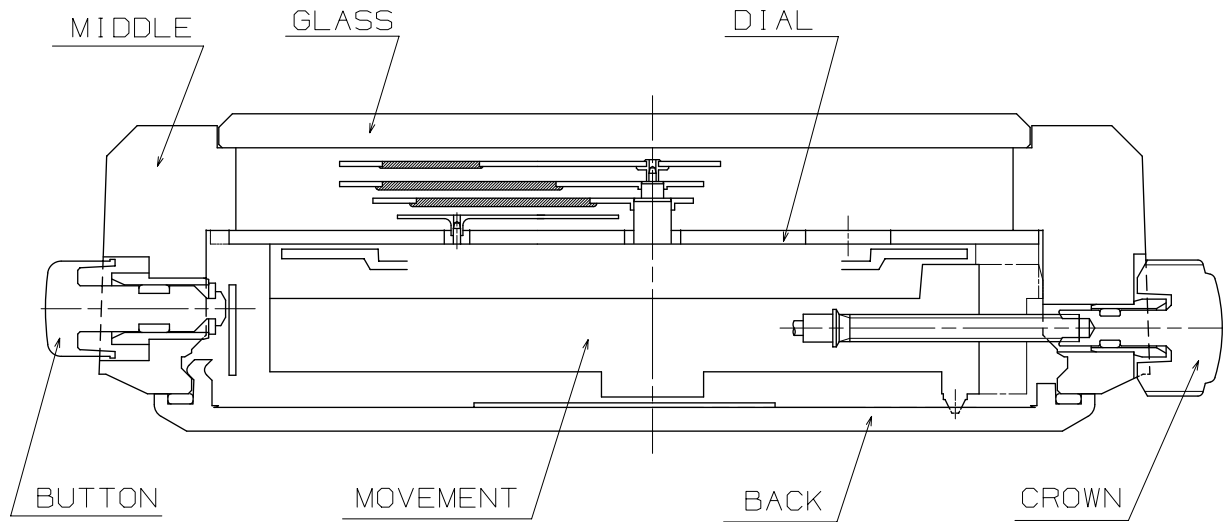


*Acrylic Glass 50
*Mineral Glass 40

	TYPE M	TYPE L
A	287	332
B	403	448
C	40	85
D	245	290
E	520	565
F	230	275

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

Version:5

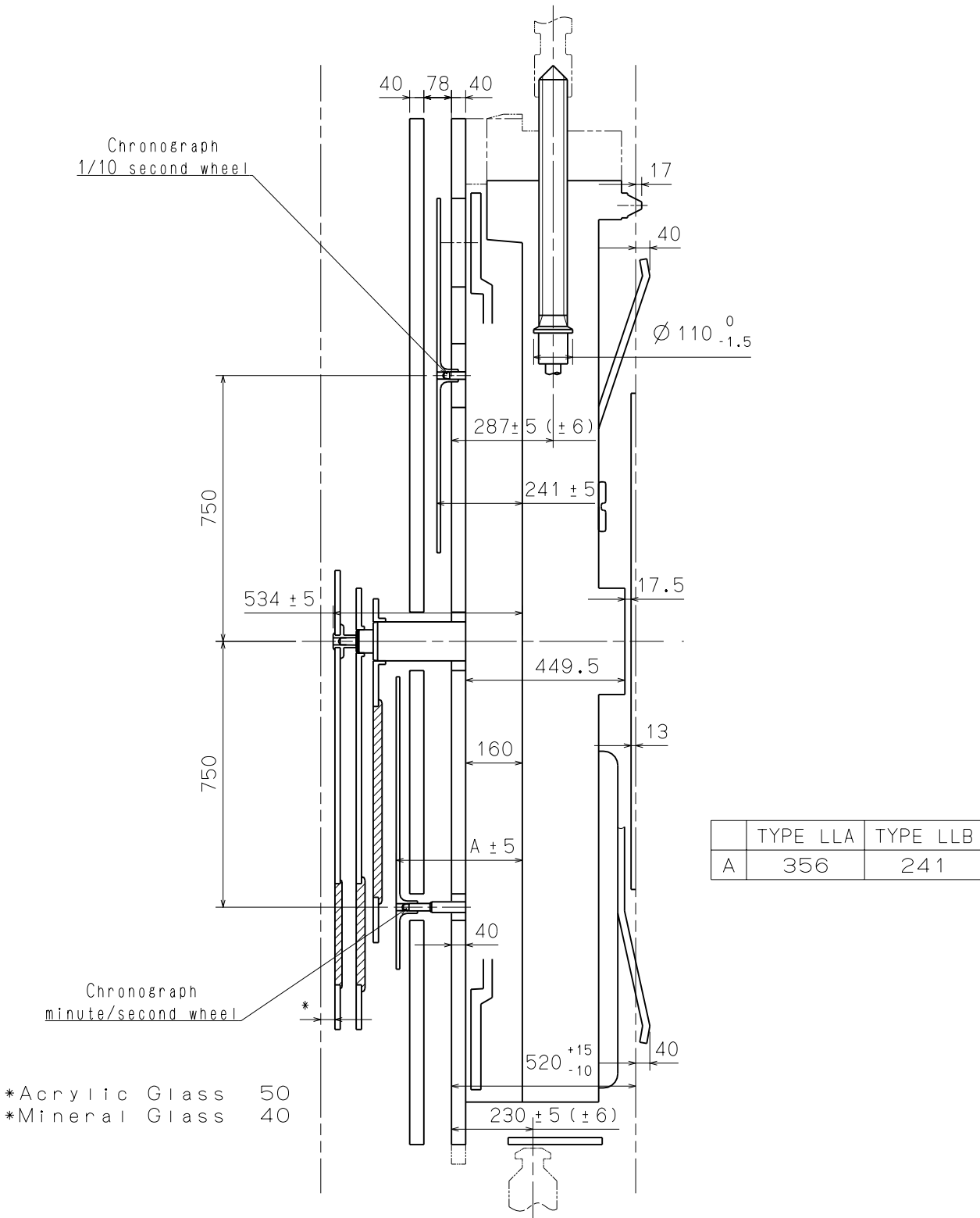


	TYPE M	TYPE L
A	40	40
B	15	15
C	45	45
D	15	15
E	33	33
F	15	15
G	80	80
H	40	85
J	35	35
K	10	10
L	35	35

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

Version:5

TYPE LLA/LLB



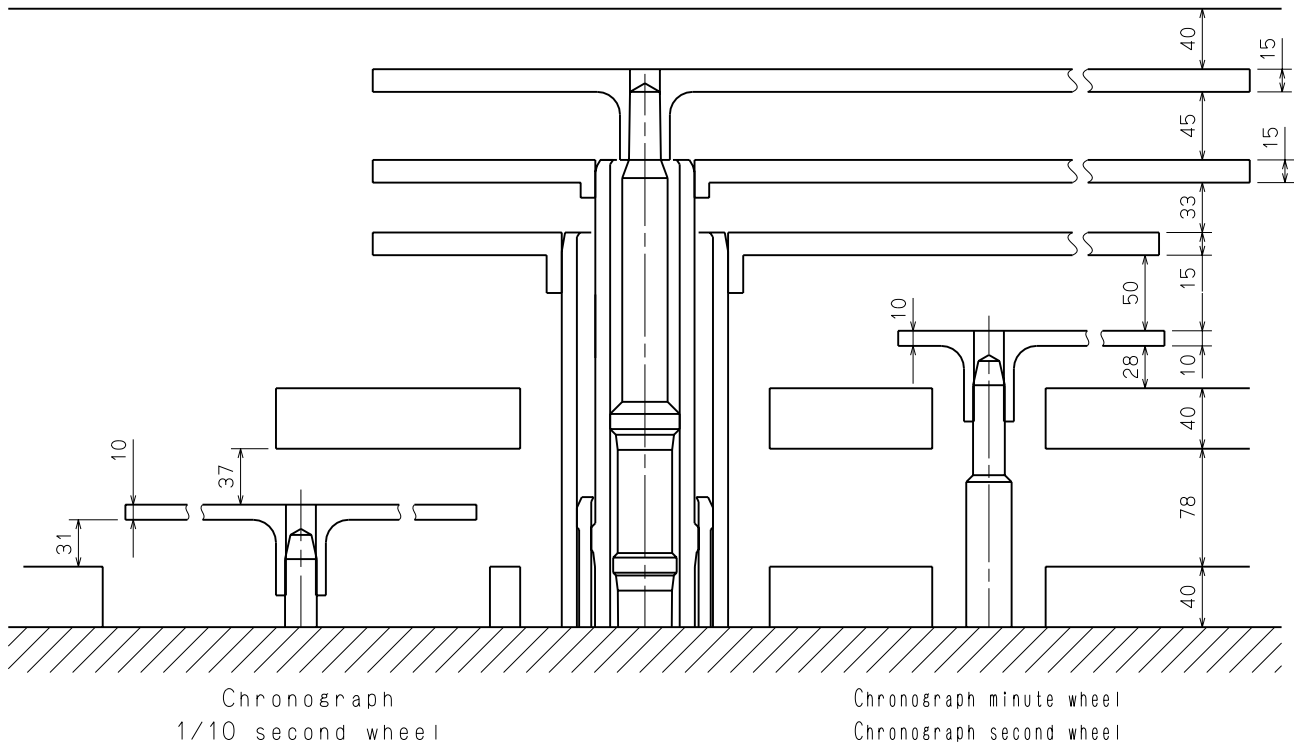
	TYPE LLA	TYPE LLB
A	356	241

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

Version:1

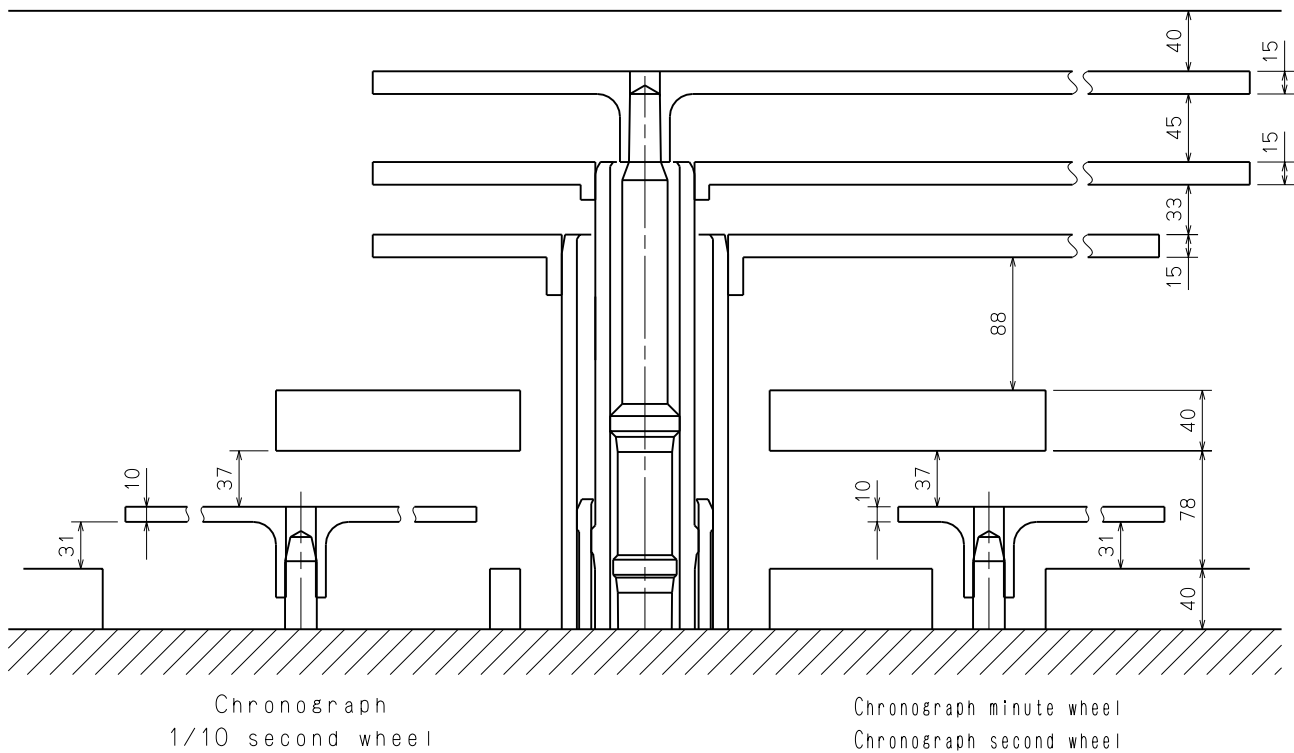
TYPE LLA

MINERAL GLASS



TYPE LLB

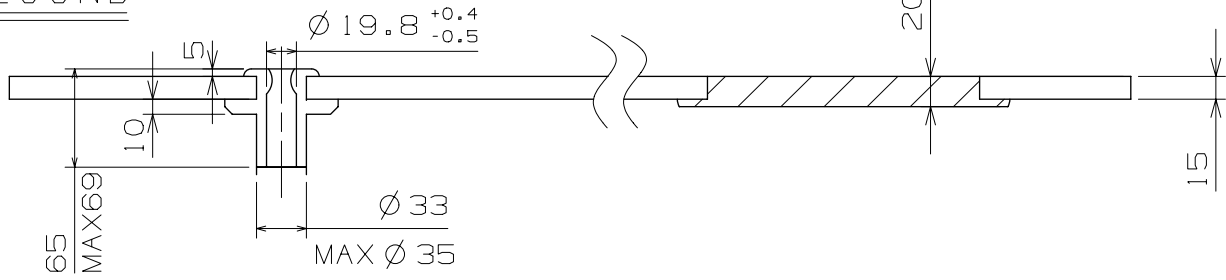
MINERAL GLASS



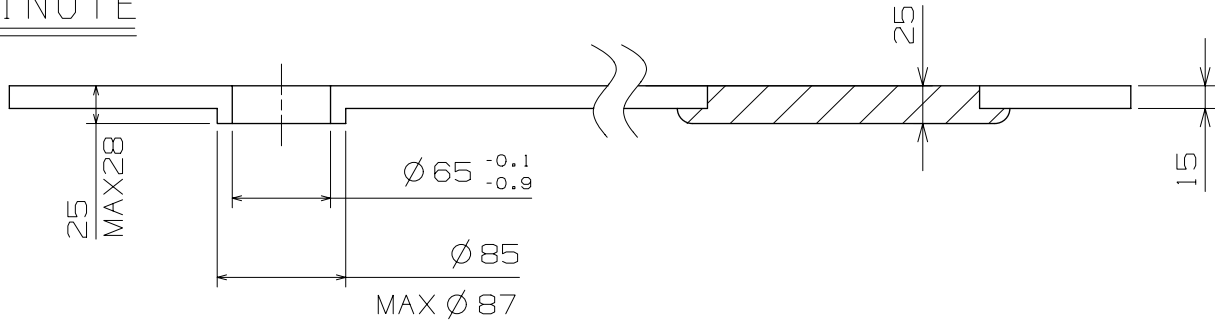
Scale : \neq
Unit : 1 = 1/100mm

Version : 1

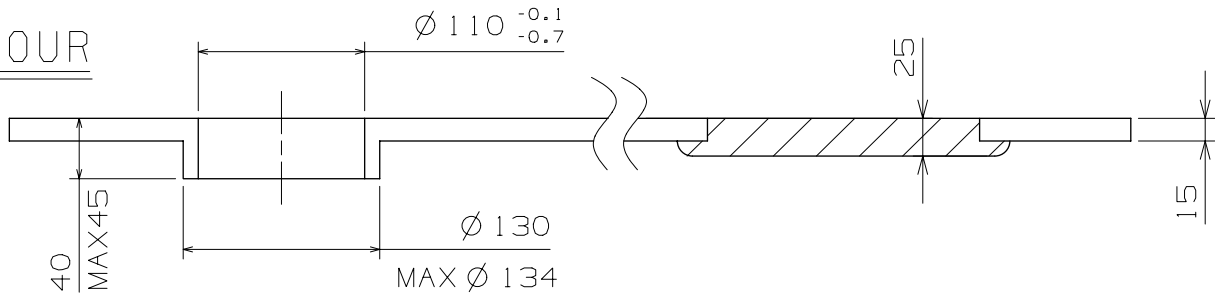
SECOND



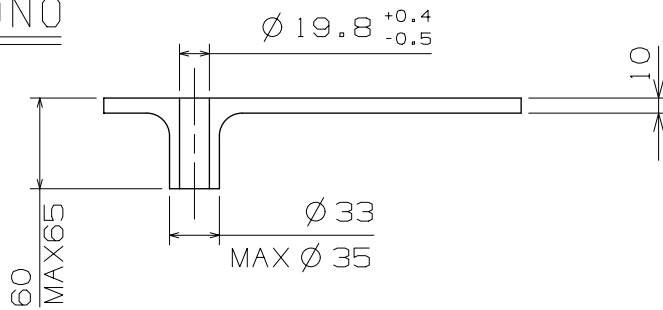
MINUTE



HOUR



CHRONO



Scale : 20/1

Unit : 1=1/100mm

Version:4