

# Cal. VD72A

$\phi$  23.70 mm

H 3.45 mm

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



## MOVEMENT SPECIFICATION - 1

### CAL.VD72A 10 1/2 Ligne Quartz Movement Two Hands with One Eye ( Date )

#### 1. MOVEMENT DIMENSIONS

- Outside diameter  $\phi 23.70$  22.60mm (12H~6H) x 22.60mm (3H~9H)
- Casing diameter  $\phi 23.30$  22.10mm (12H~6H) x 21.40mm (3H~9H)
- Total height 3.45 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 Minute : Less than 0.6 $\mu$ N·m ( 60mg·mm )  
Hour : Less than 0.6 $\mu$ N·m ( 60mg·mm )  
Less than 0.05 $\mu$ N·m ( 5mg·mm )  
for date hand
- Small hands unbalance

#### 3. BATTERY

- Type Silver oxide battery
- Size  $\phi 6.8$  x t 2.6 ( mm )
- Nominal voltage 1.55V
- Battery life Approx. 3 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. TEST OF ACCURACY

- Equipment to be used SEIKO Quartz Tester QT - 99  
Greiner Quartz Timer - C  
Watch Q-Tester 4000
- Duration of measurement 10 seconds
- Microphone to be used Electromagnetic detection type

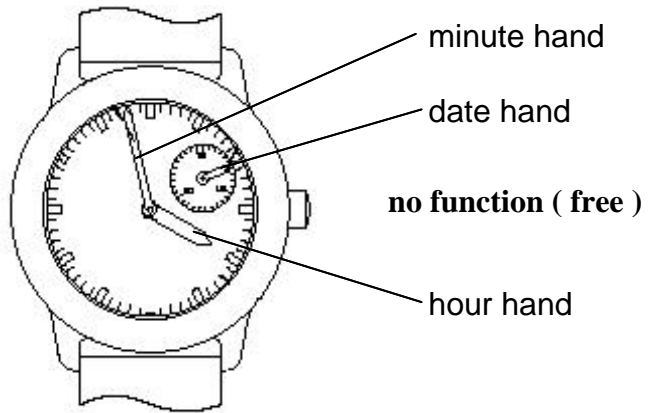
**\* All specifications are subject to change without notice.**

**Movement Specification - 2**

CAL. VD72A

**OPERATION**

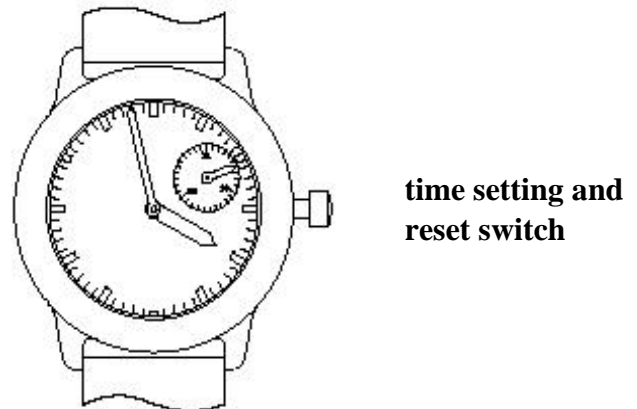
[ normal position ]



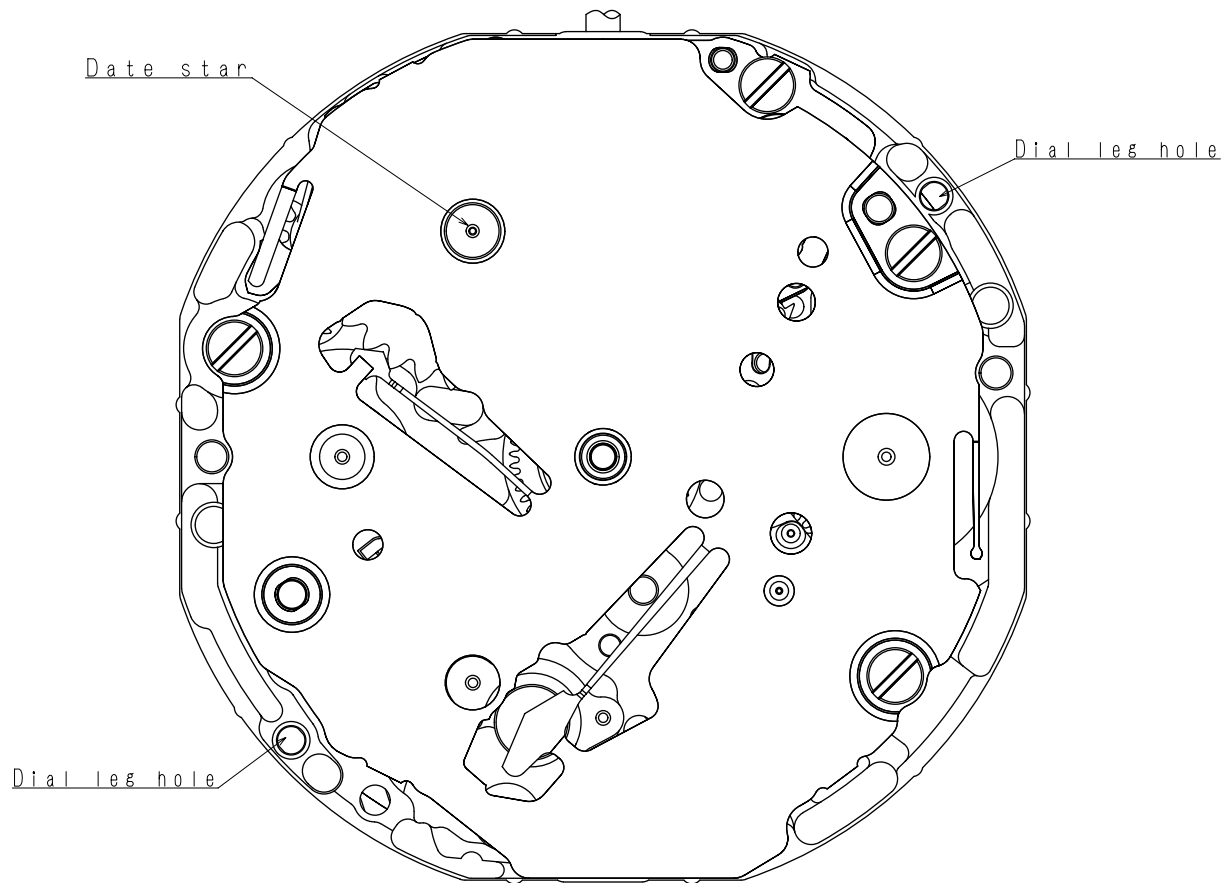
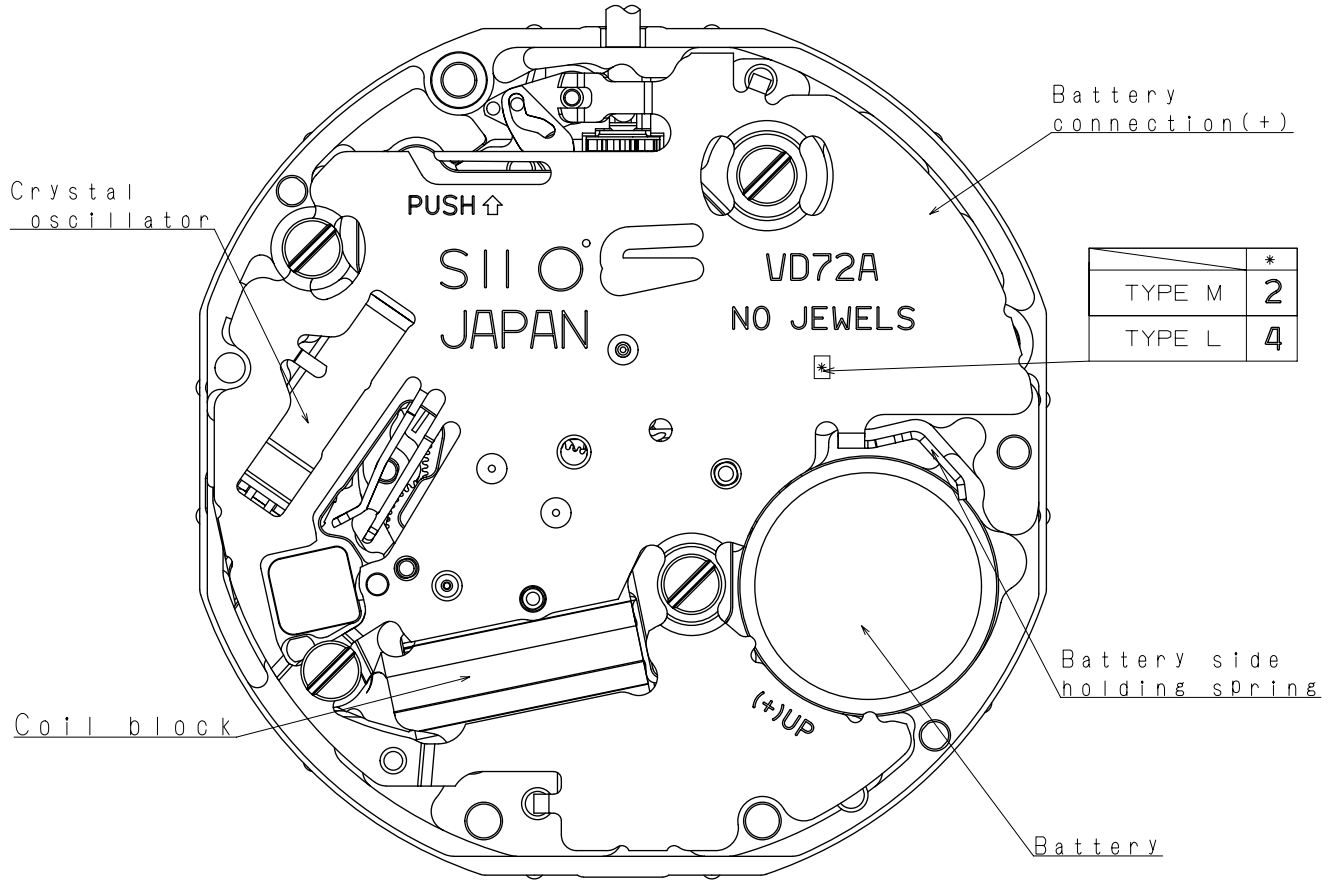
[ 1st click ]



[ 2nd click ]



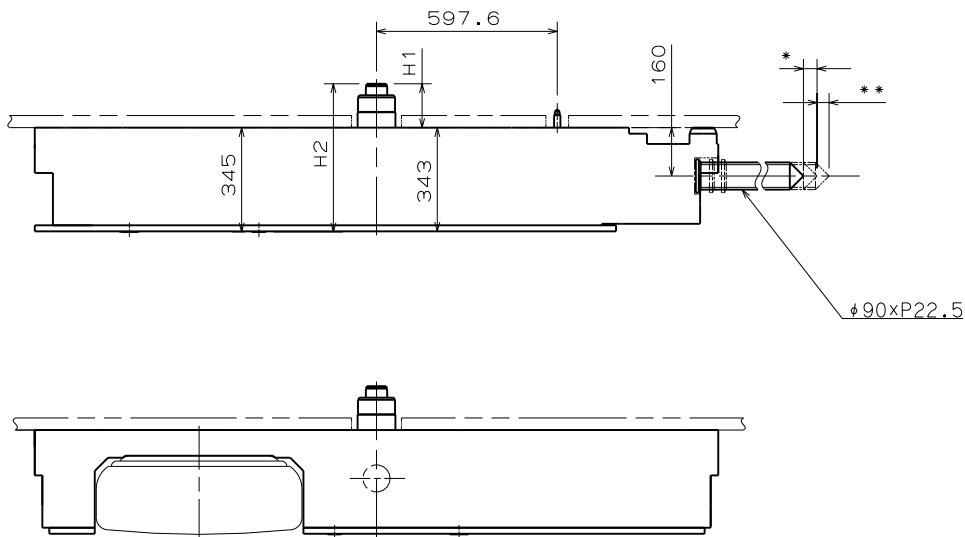
**Version 1**



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

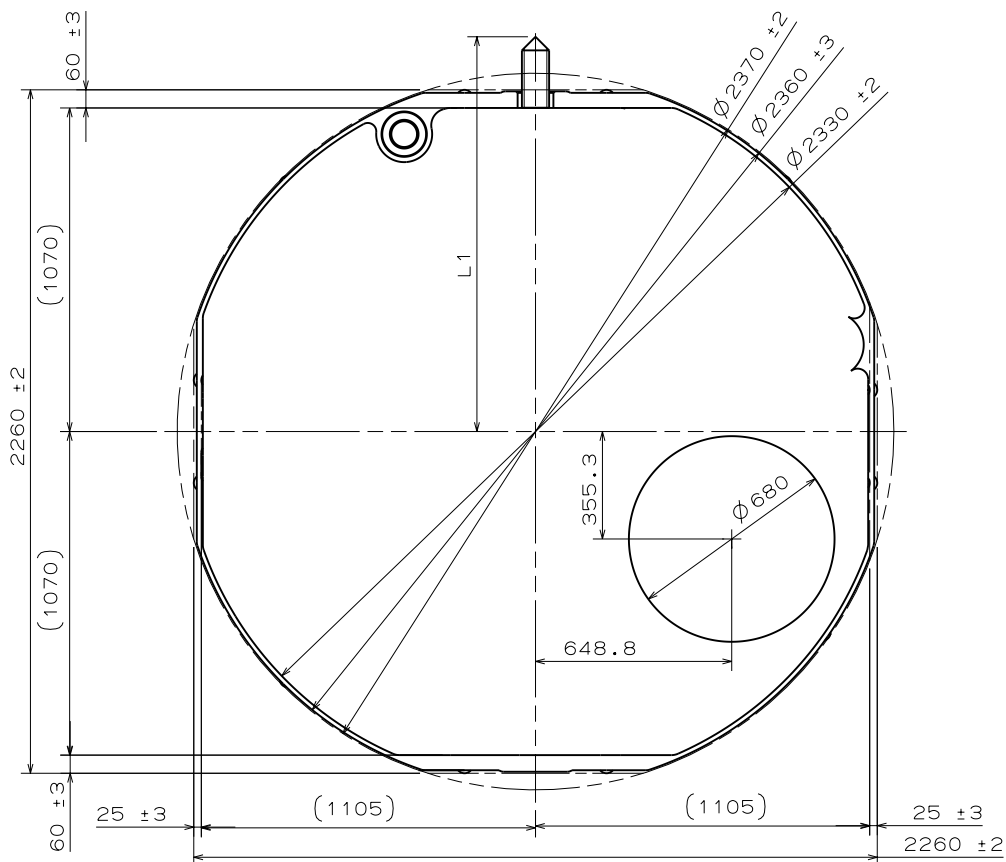
Version:3

\* First pull out stroke 45  
\*\* Second pull out stroke 39.9



Center Post		TYPE M	TYPE L
Maximum height from main plate surface	H1	150	230
Total height incl. movement	H2	495	575

Hand Setting Stem	TYPE A	TYPE B
L1	2436	3012

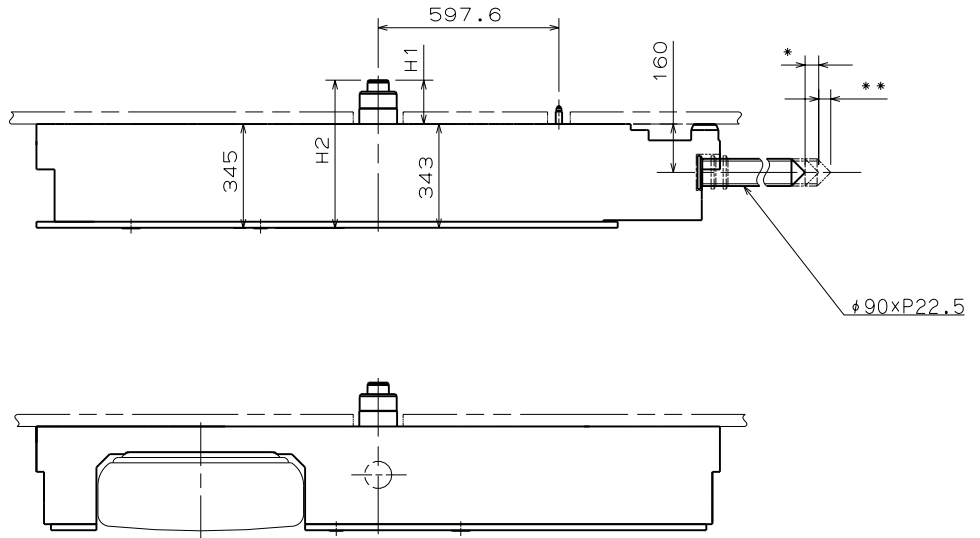


Scale : 4/1

Unit : 1=1/100mm

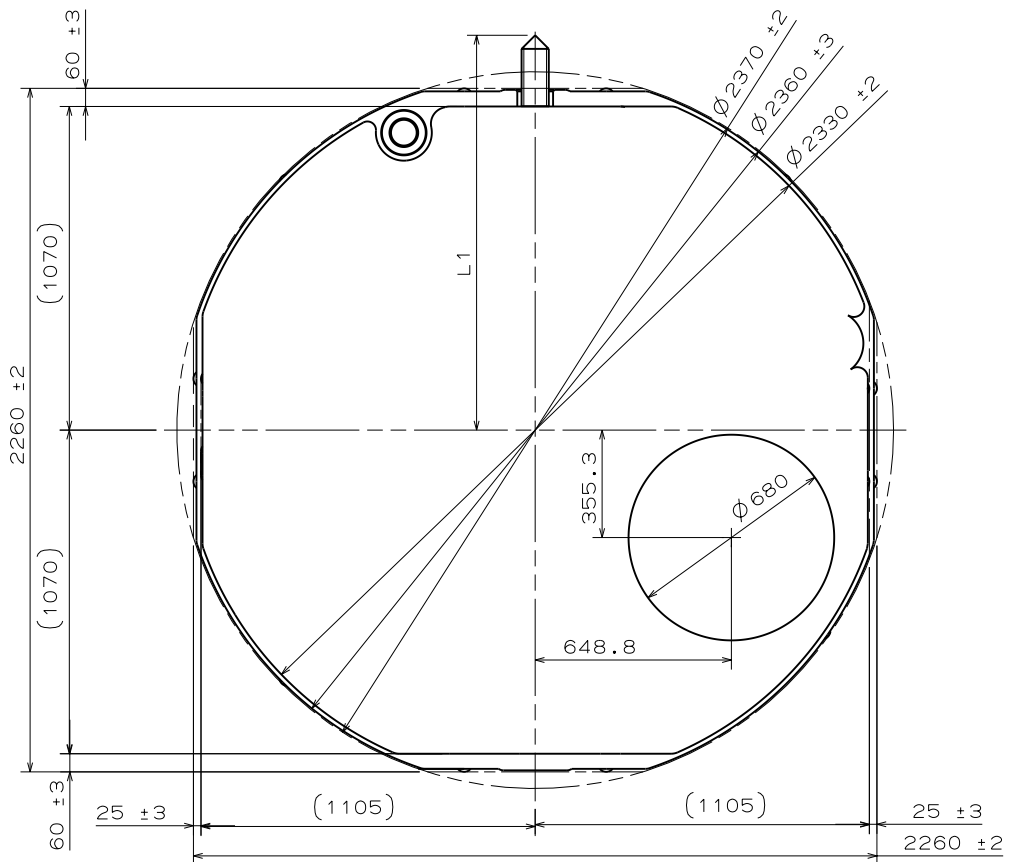
Version:5

\* First pull out stroke 45  
\*\* Second pull out stroke 39.9



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	150	230
Total height incl. movement 機芯總高度	H2	495	575

Hand Setting Stem	TYPE A	TYPE B
L1	2436	3012



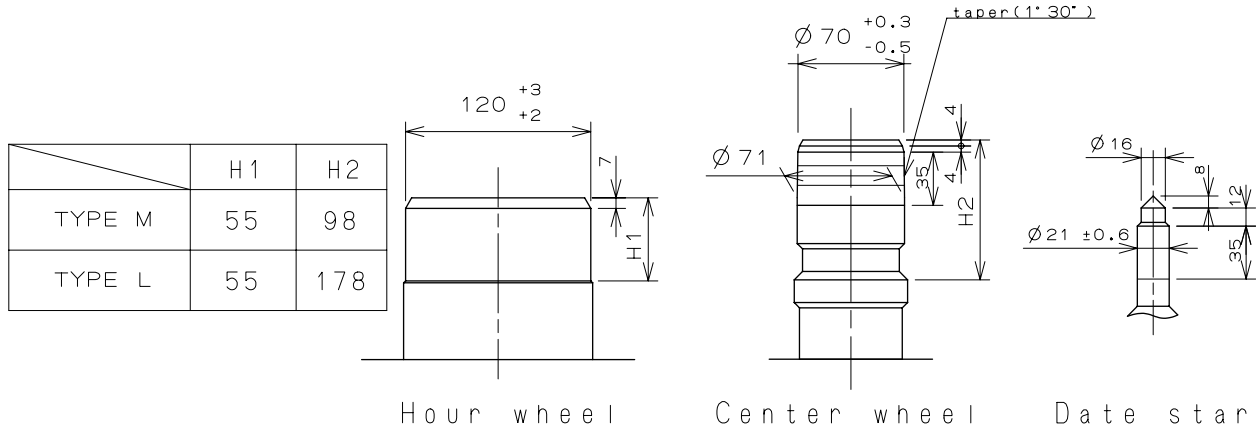
Scale : 4/1  
Unit : 1=1/100mm

Version:5

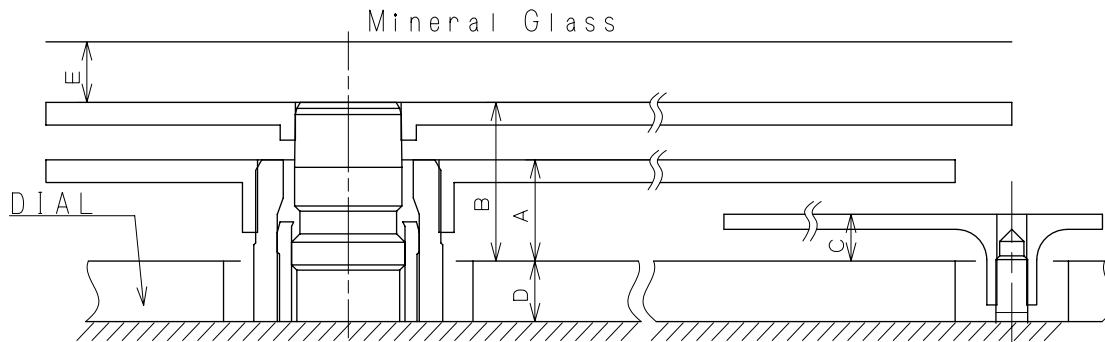
# Hand Fitting

Cal. VD72A

- \*Hour hand unbalance  $\leq 0.6 \mu\text{N}\cdot\text{m}$  (60mg·mm)
- \*Minute hand unbalance  $\leq 0.6 \mu\text{N}\cdot\text{m}$  (60mg·mm)
- \*Date hand unbalance  $\leq 0.05 \mu\text{N}\cdot\text{m}$  (5mg·mm)



Part name	Part No.	
	TYPE M	TYPE L
Hour wheel	0273 1690	0273 0350
Center wheel	0221 0690	0221 0760
Date star	0970 1690	0970 0370



	A	B	C	D	E
TYPE M	72	110	31	40	35
TYPE L	95	145	41	85	40

Scale : 20/1

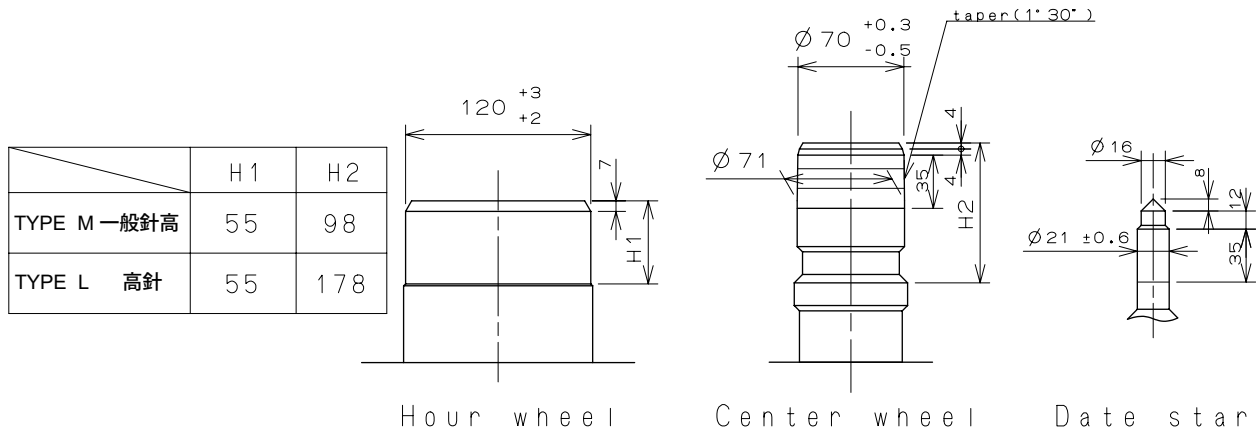
Unit : 1=1/100mm

Version:3

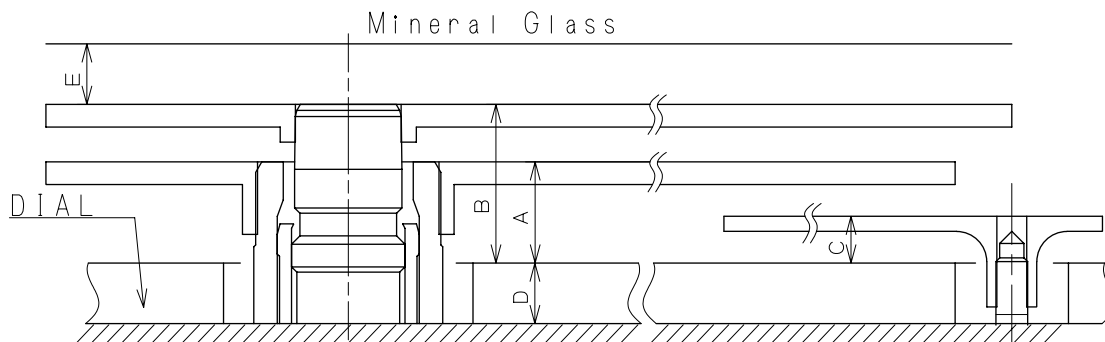
# Hand Fitting

Cal. VD72A

- \*Hour hand unbalance  $\leq 0.6 \mu\text{N}\cdot\text{m}$  (60mg·mm)
- \*Minute hand unbalance  $\leq 0.6 \mu\text{N}\cdot\text{m}$  (60mg·mm)
- \*Date hand unbalance  $\leq 0.05 \mu\text{N}\cdot\text{m}$  (5mg·mm)



Part name	Part No.	
	TYPE M 一般針高	TYPE L 高針
Hour wheel 時針輪	0273 1690	0273 0350
Center wheel 分針輪	0221 0690	0221 0760
Date star 日曆針輪	0970 1690	0970 0370



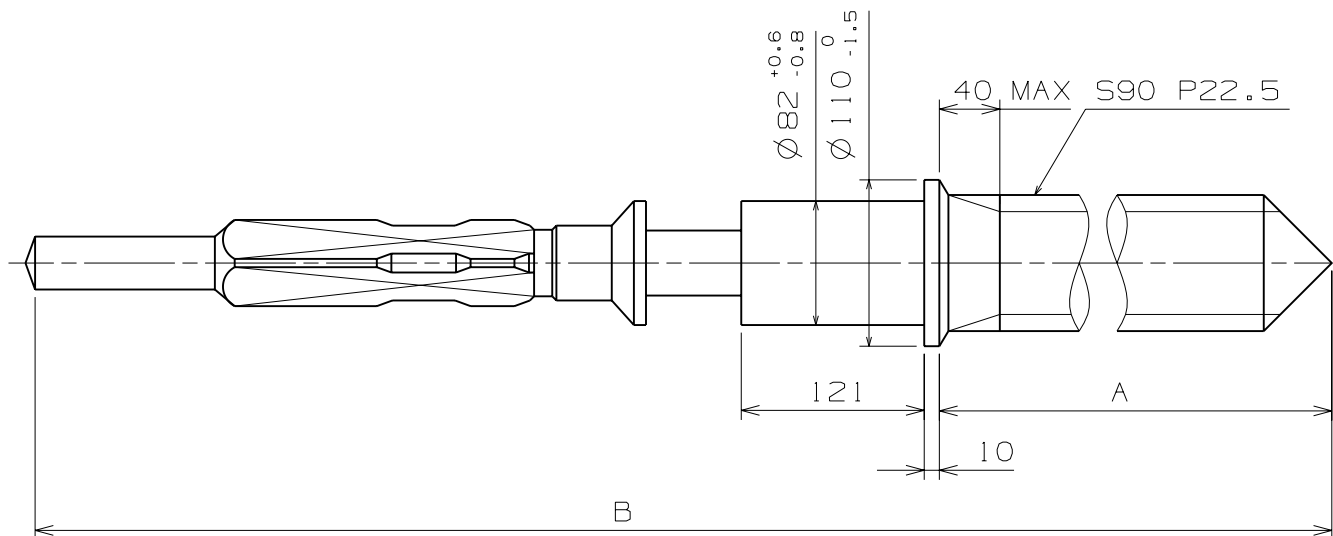
	A	B	C	D	E
TYPE M 一般針高	72	110	31	40	35
TYPE L 高針	95	145	41	85	40

Scale : 20/1

Unit : 1=1/100mm

Version : 3



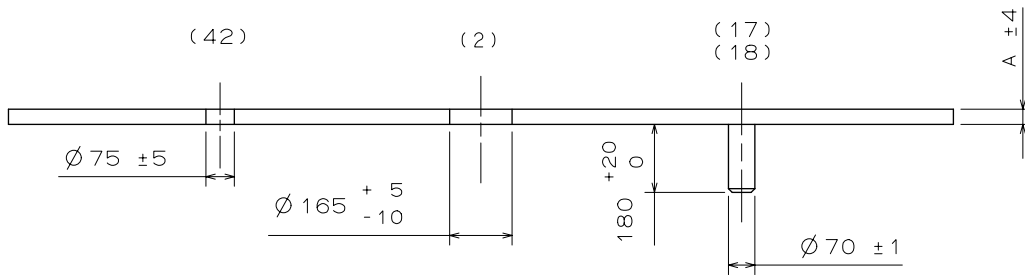
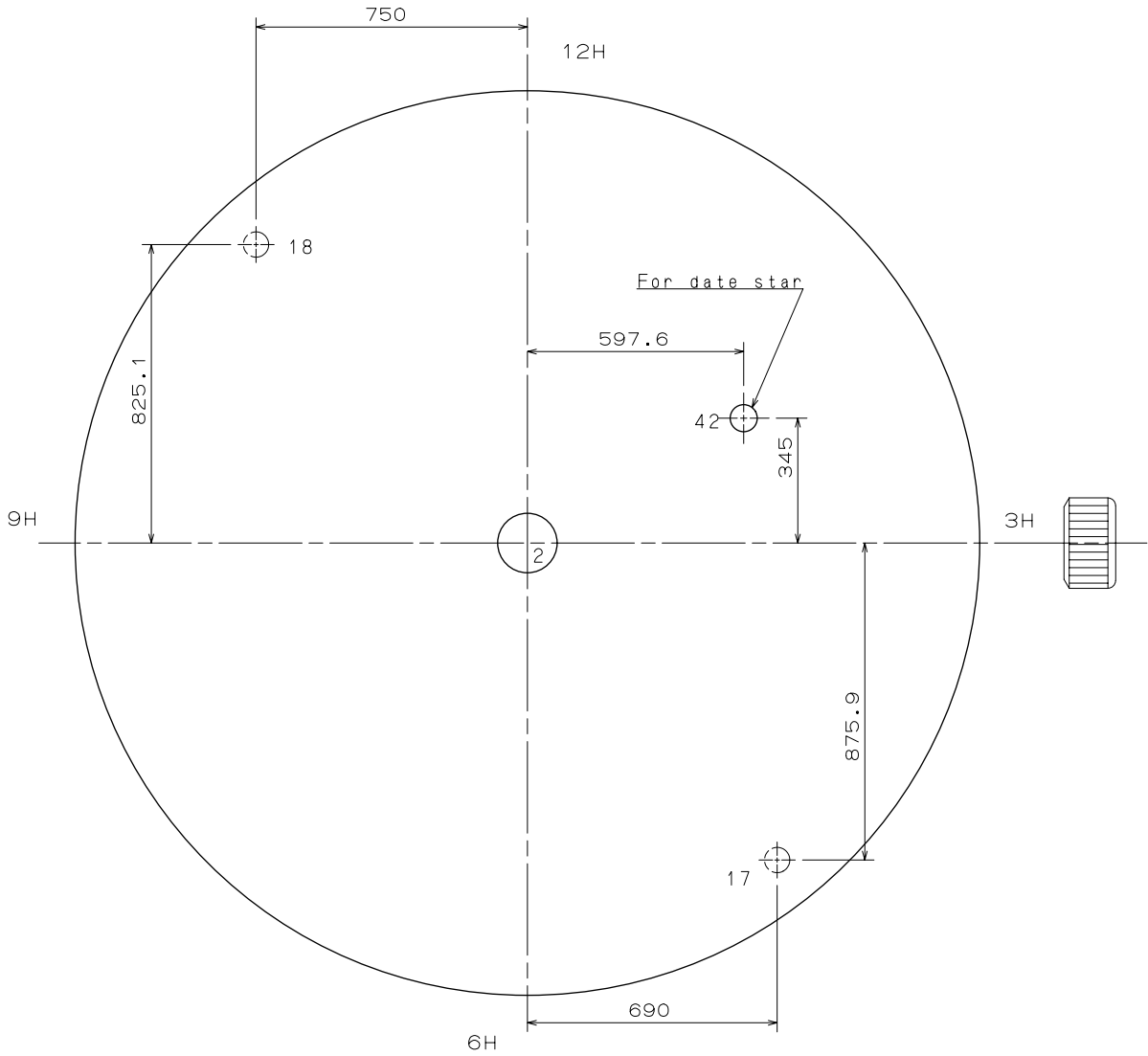


	Part. No.	A	B
TYPE A	0351 1770	1371	1969
TYPE B	0351 1220	1947	2545

Scale : 20/1

Unit : 1=1/100mm

Version:4



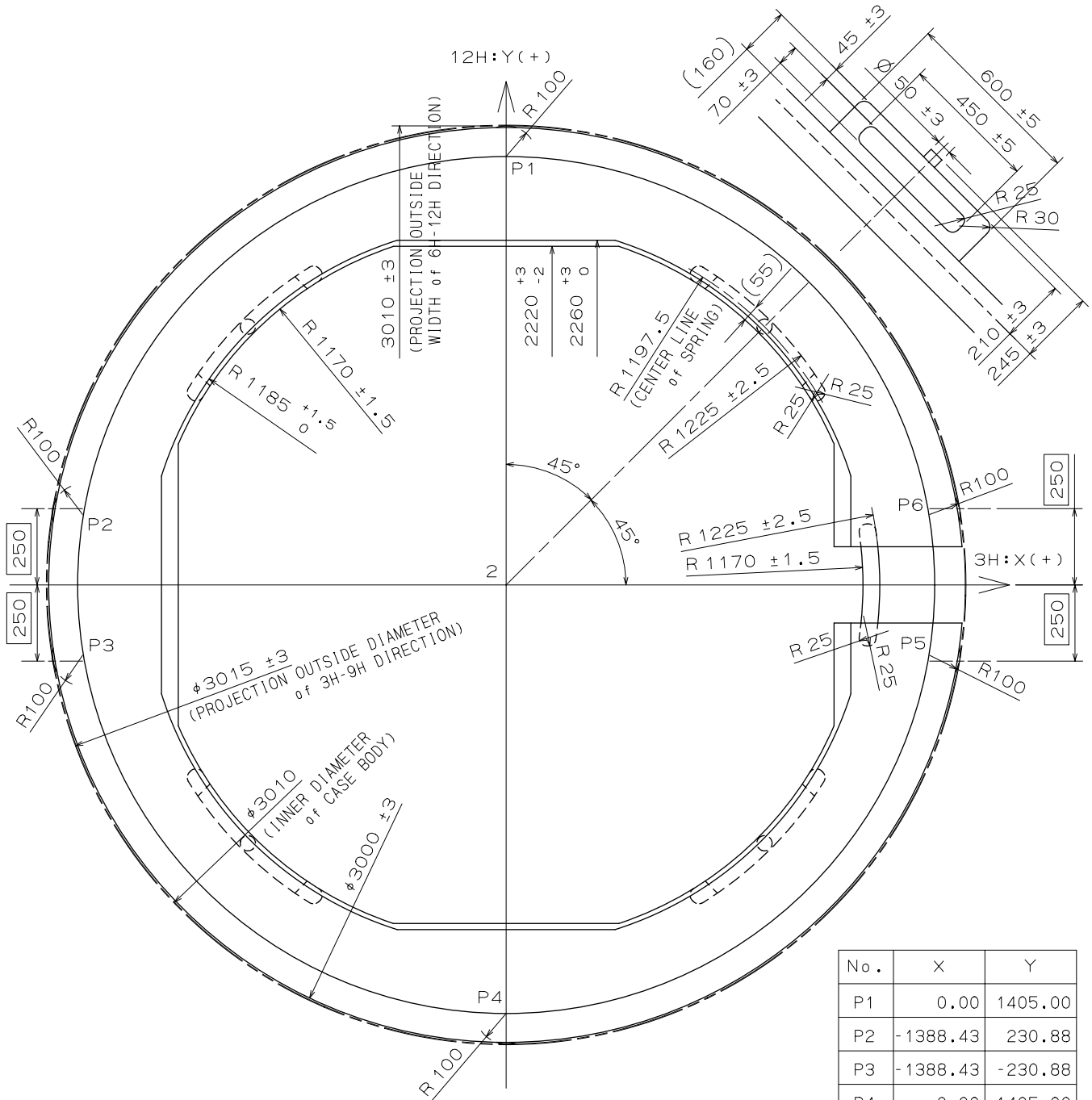
	TYPE M	TYPE L
A	40	85

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

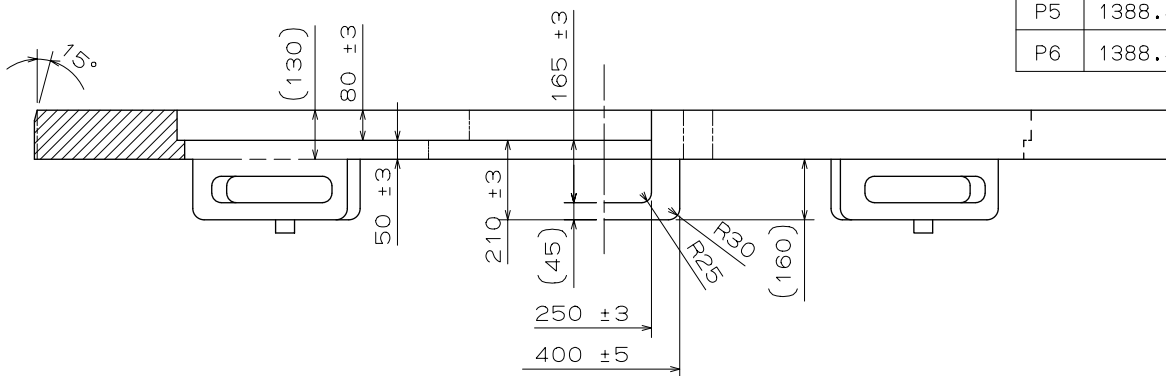
Version:2

# Casing Ring

Cal. VD72A



No.	X	Y
P1	0.00	1405.00
P2	-1388.43	230.88
P3	-1388.43	-230.88
P4	0.00	-1405.00
P5	1388.43	-230.88
P6	1388.43	230.88

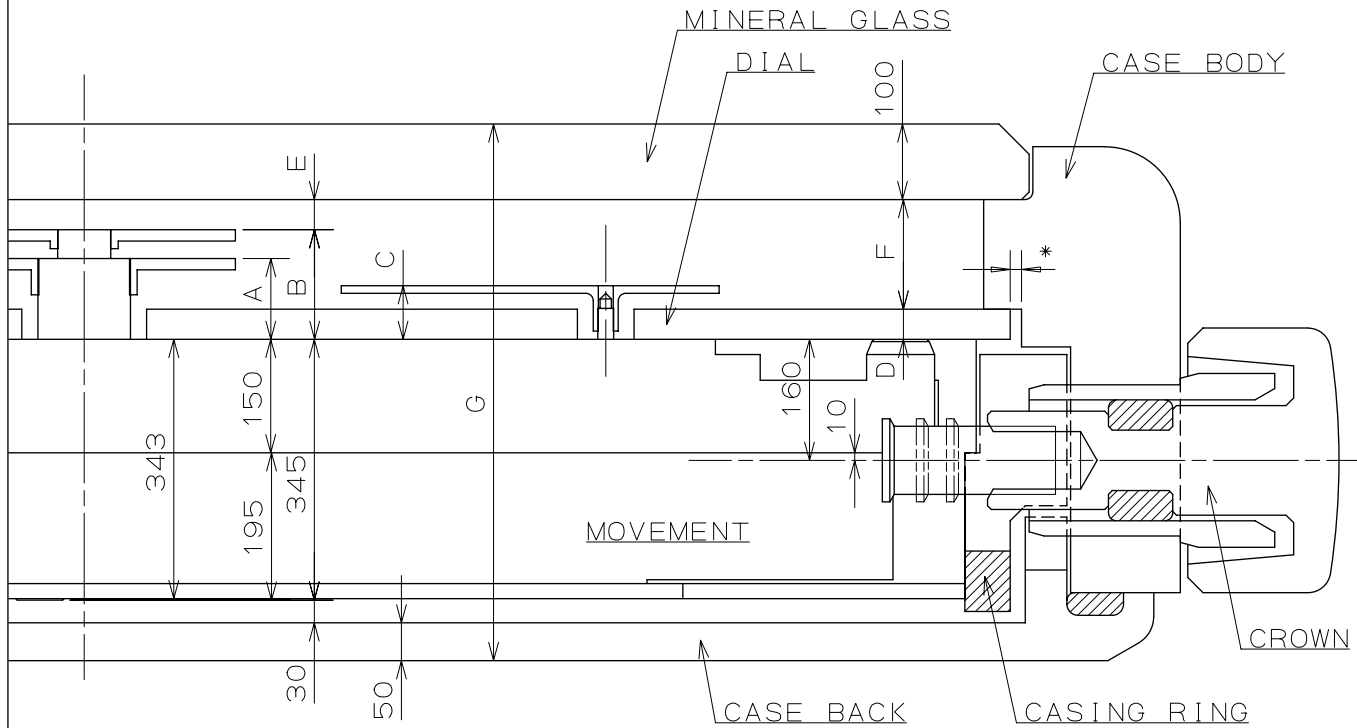


SECTIONAL VIEW of 6H(12H) DIRECTION

SIDE VIEW of 3H DIRECTION

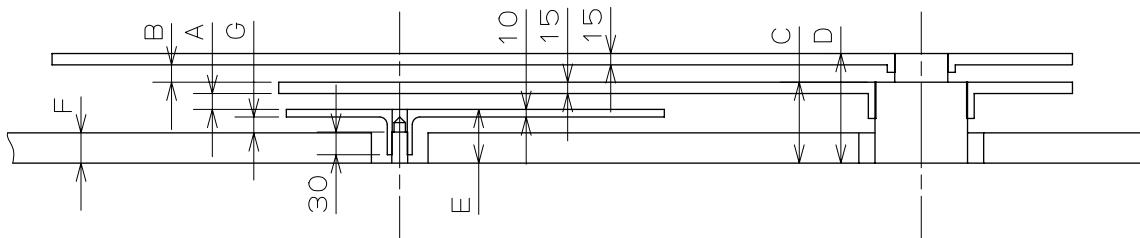
Scale : 5/1  
Unit : 1=1/100mm

Version:1



	A	B	C	D	E	F	G
TYPE M	112	150	71	40	35	145	710
TYPE L	180	230	126	85	40	185	795

\*Recommended Dimension(Clearance of DIAL and CASE BODY):15



	A	B	C	D	E	F	G
TYPE M	26	23	112	150	71	40	21
TYPE L	39	35	180	230	126	85	31

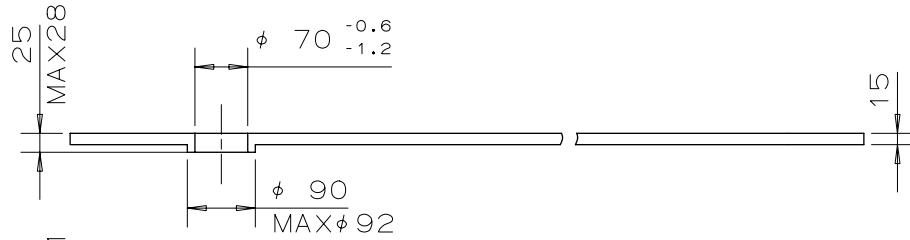
Scale : 10/1

Unit : 1=1/100mm

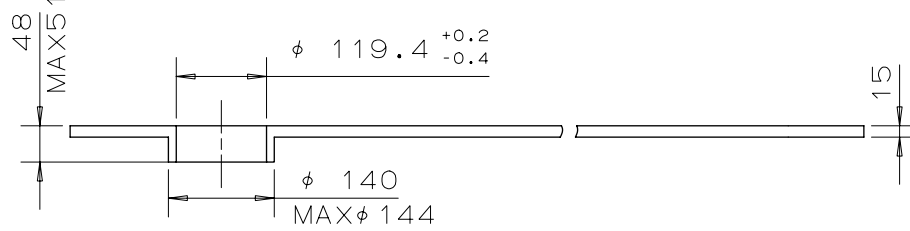
Version:4

TYPE M

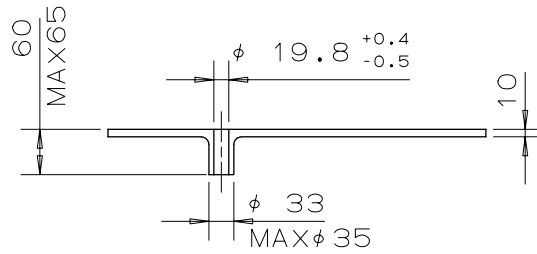
MINUTE



HOUR

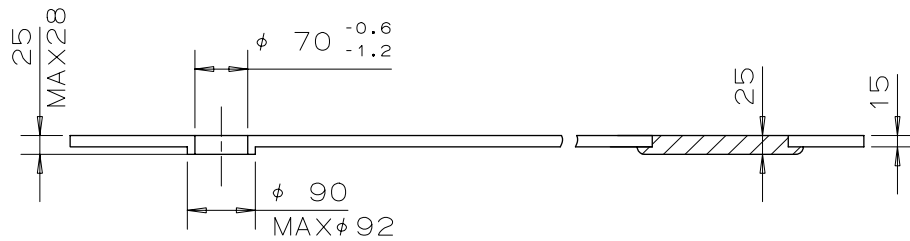


DATE

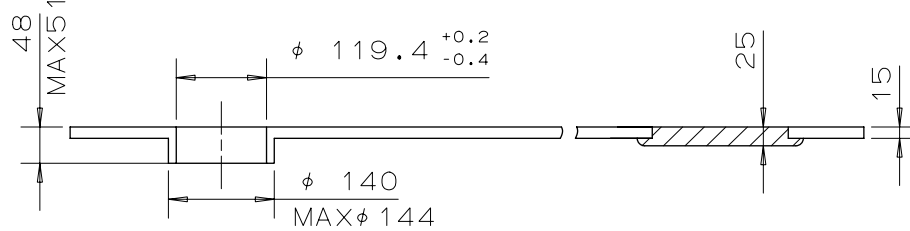


TYPE L

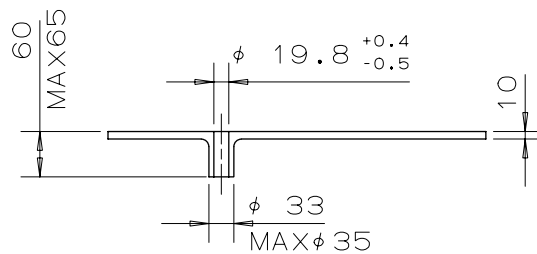
MINUTE



HOUR



DATE



Scale : 10/1

Unit : 1=1/100mm

Version:2