

Watch Movement Specification and Drawing

STANDARD

Cal. AL20E

Movement Size

6 3/4 × 8'''

Casing Diameter

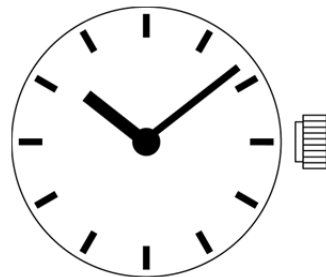
15.3 × 17.8 mm

Height

2.99mm

Battery Life

2 years



Date: 7/Apr./'17

Cal. AL20E

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Analog Quartz 6 3/4 × 8^{mm} Standard Series Movement / Two Hands (H/M)

1. MOVEMENT DIMENSIONS

Outside diameter	15.30mm(3-9H) × 18.20mm(12-6H)
Casing diameter	15.30mm(3-9H) × 17.80mm(12-6H)
Total height	2.99mm

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°C to +50°C
Regulation device	Nil (Pre-adjusted)

3. INDICATOR / FUNCTIONS

2 Hands	Hour / Minute
Reset switch	
Setting mechanism	Crown at normal position : Free Crown pulled out 1st click : Time setting / Reset

4. FEATURES

Jewels	0 Jewels
Anti-magnetism	Over 1600A/m (Direct current magnetic field)
Maximum unbalance of hands	Minute hand : 0.6 μ N·m Hour hand : 0.5 μ N·m

5. BATTERY

Type / Size	Silver oxide battery / φ 6.8mm × t 2.6mm
Recommended battery	SR626SW (Maxell, Sony, Seizaiken)
Nominal voltage	1.55 V
Battery life	Approx. 2 years
Driving current consumption	Approx. 1.5 μ A
Operation stopping voltage	1.1 V

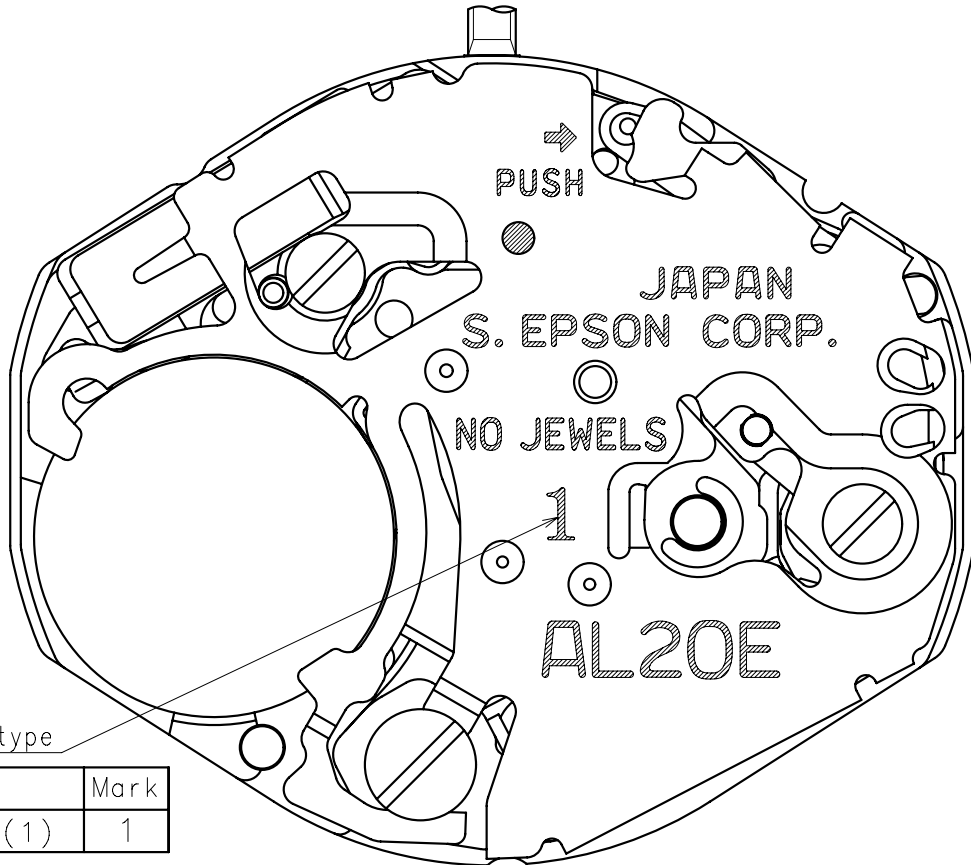
6. SEPARATED PARTS (Parts code)

Hand setting stem	0354788 or 0354787
Battery	SR626SW

7. TEST OF ACCURACY

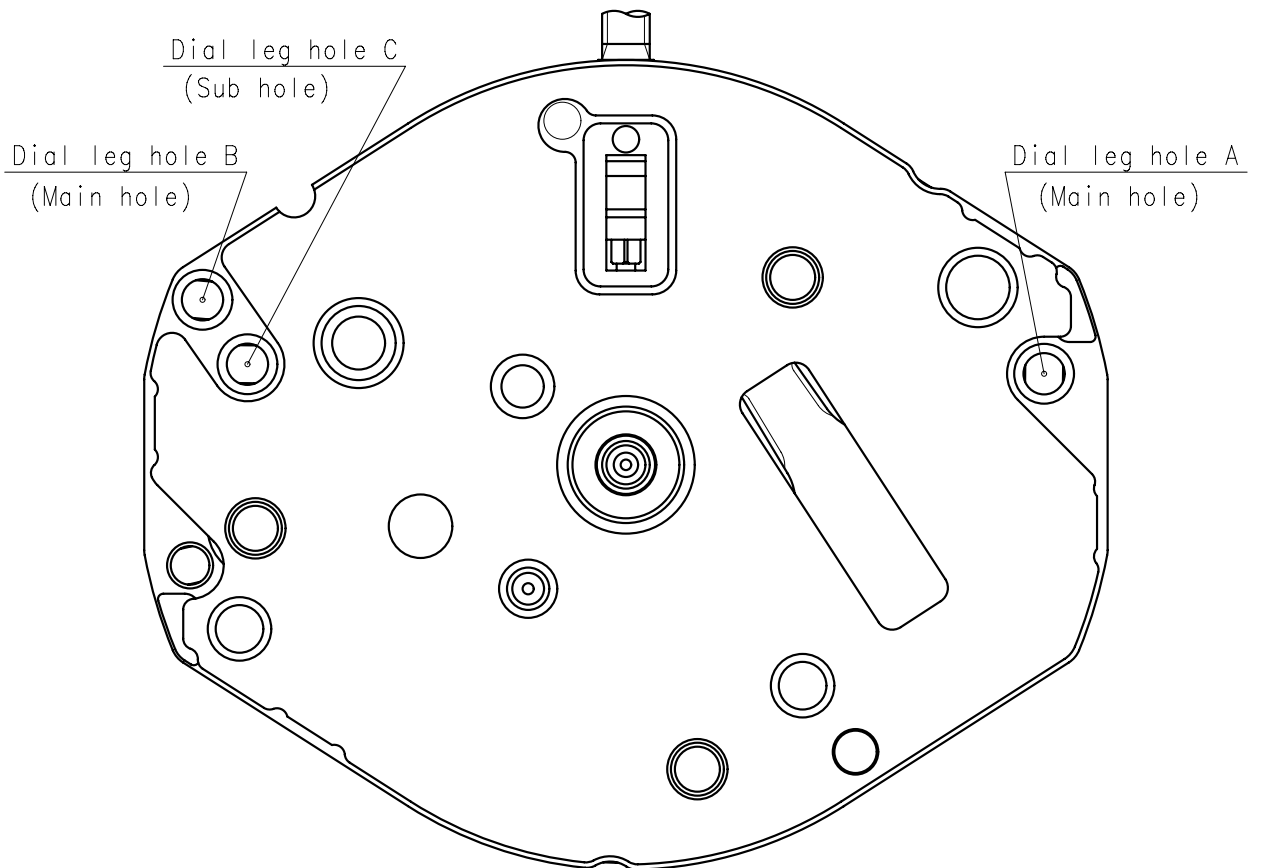
Equipment to be used	SEIKO quartz tester QT-99, Greiner quartz timer-C , Witschi Q-tester 4000
Duration of measurement	10 seconds
Microphone to be used	Electromagnetic detection type

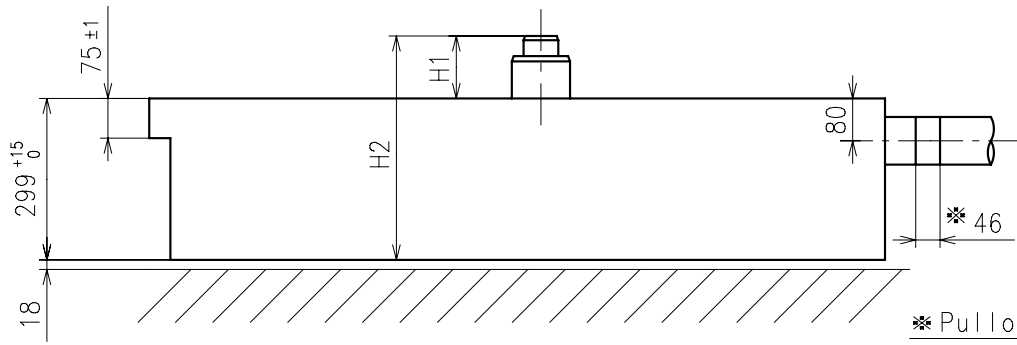
All specifications are subject to change without notice.



Hands type

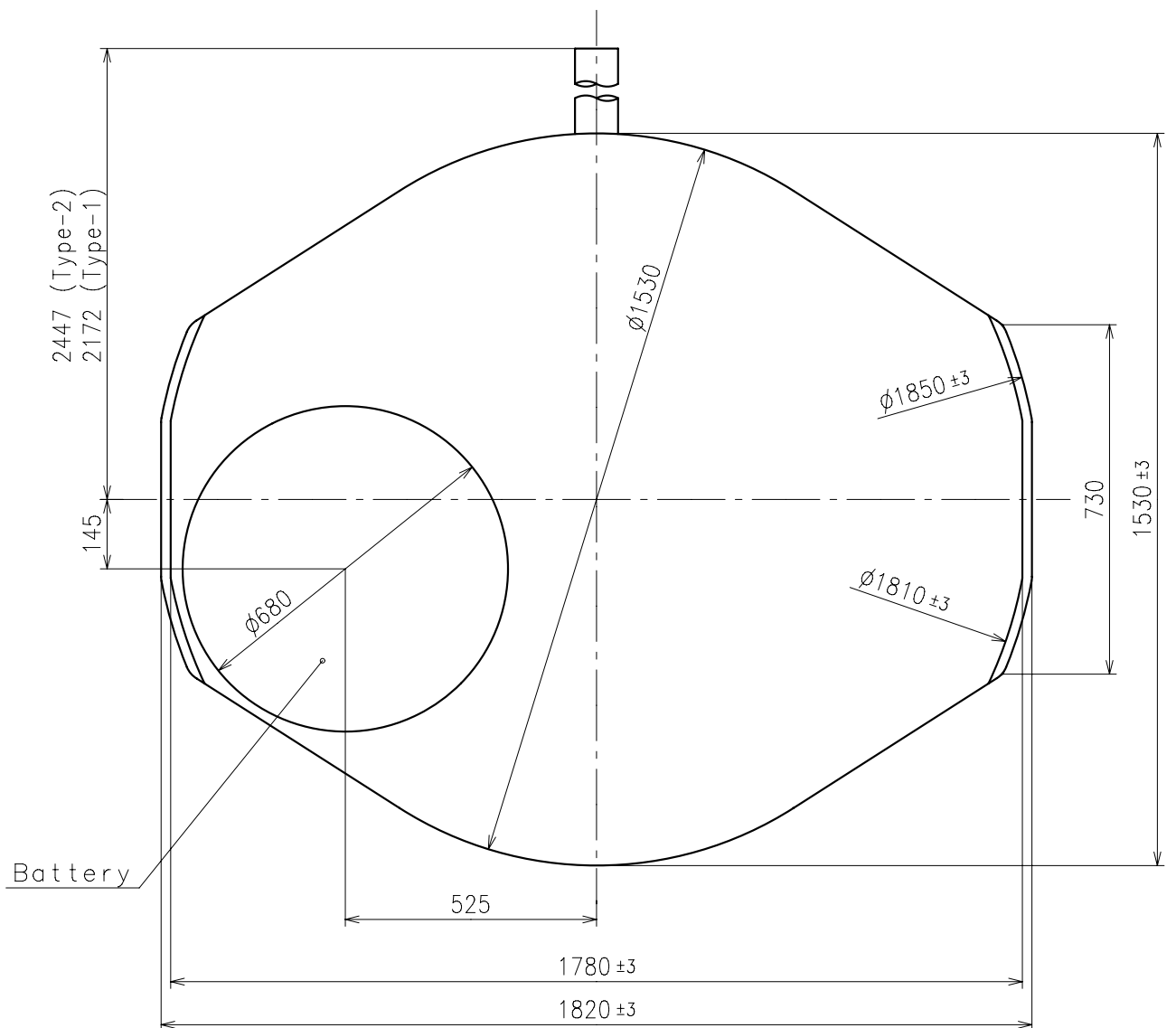
	Mark
Type S (1)	1



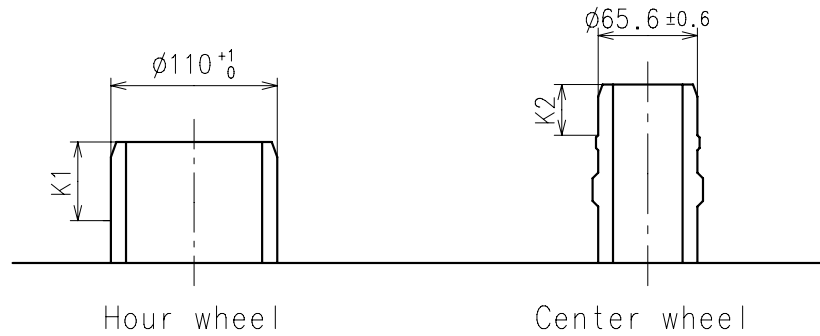


* Pullout stroke

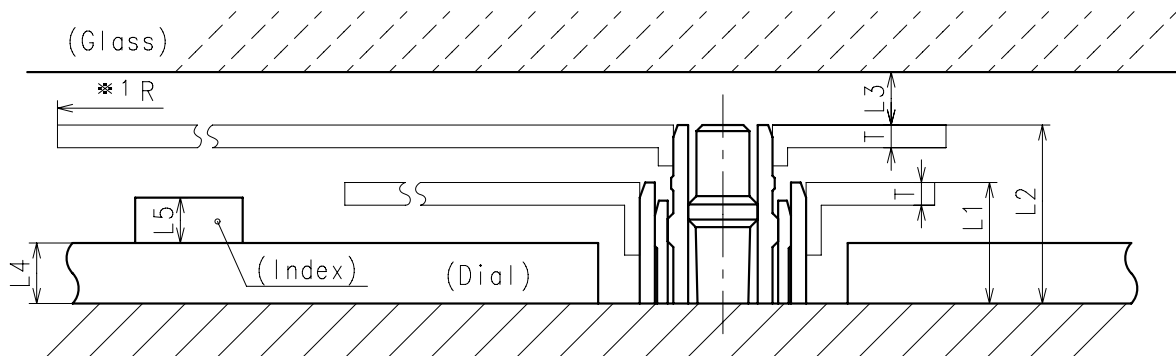
Center post		Type S (1) AL20E1
Maximum height from dial support	H1	118
Total height including movement	H2	423



- * Minute hand unbalance $\leq 0.6\mu \text{ N}\cdot\text{m}$ ($60\mu \text{ g}\cdot\text{m}$)
- * Hour hand unbalance $\leq 0.5\mu \text{ N}\cdot\text{m}$ ($50\mu \text{ g}\cdot\text{m}$)

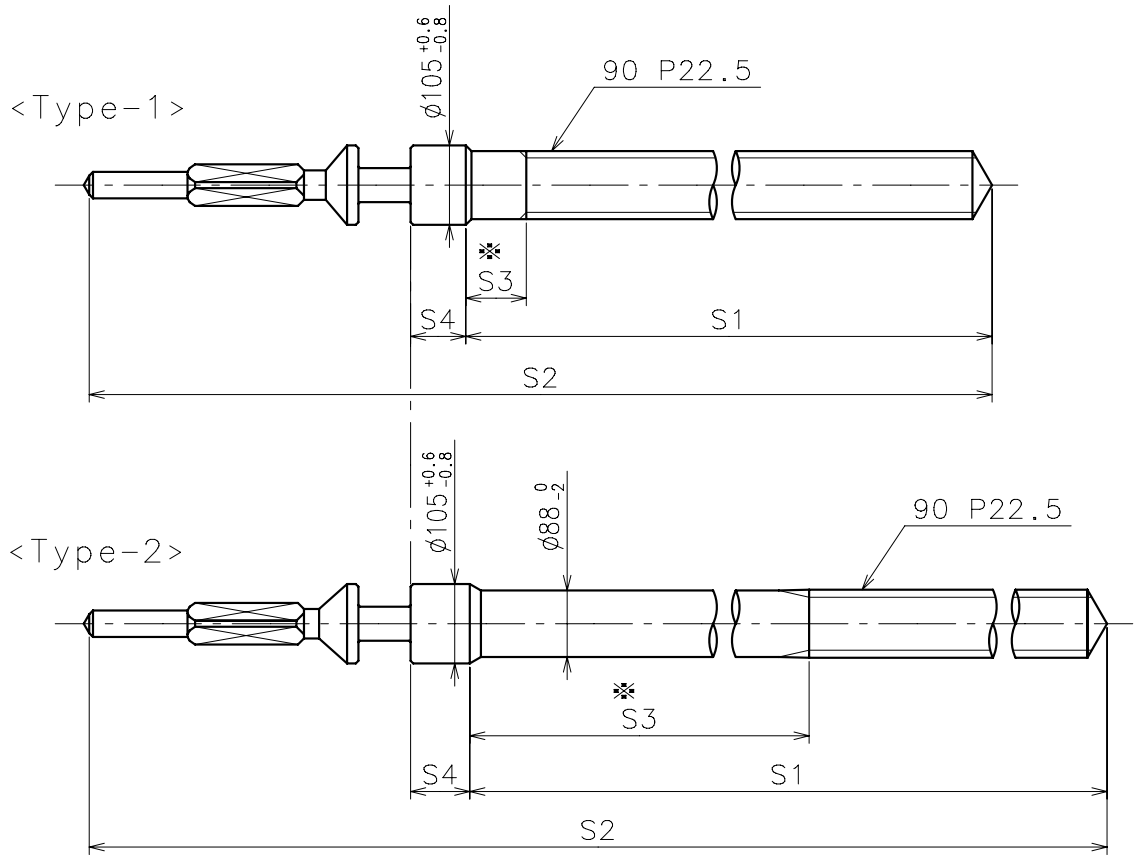


	Parts No.		Dimension	
	Hour wheel	Center wheel	K1	K2
Type S (1) AL20E1	0271796	0221797	52	33.5



	L1	L2	L3	L4	L5	T	*1 R
Type S (1) AL20E1	80	118	MIN: 35	40	MAX: 30	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.

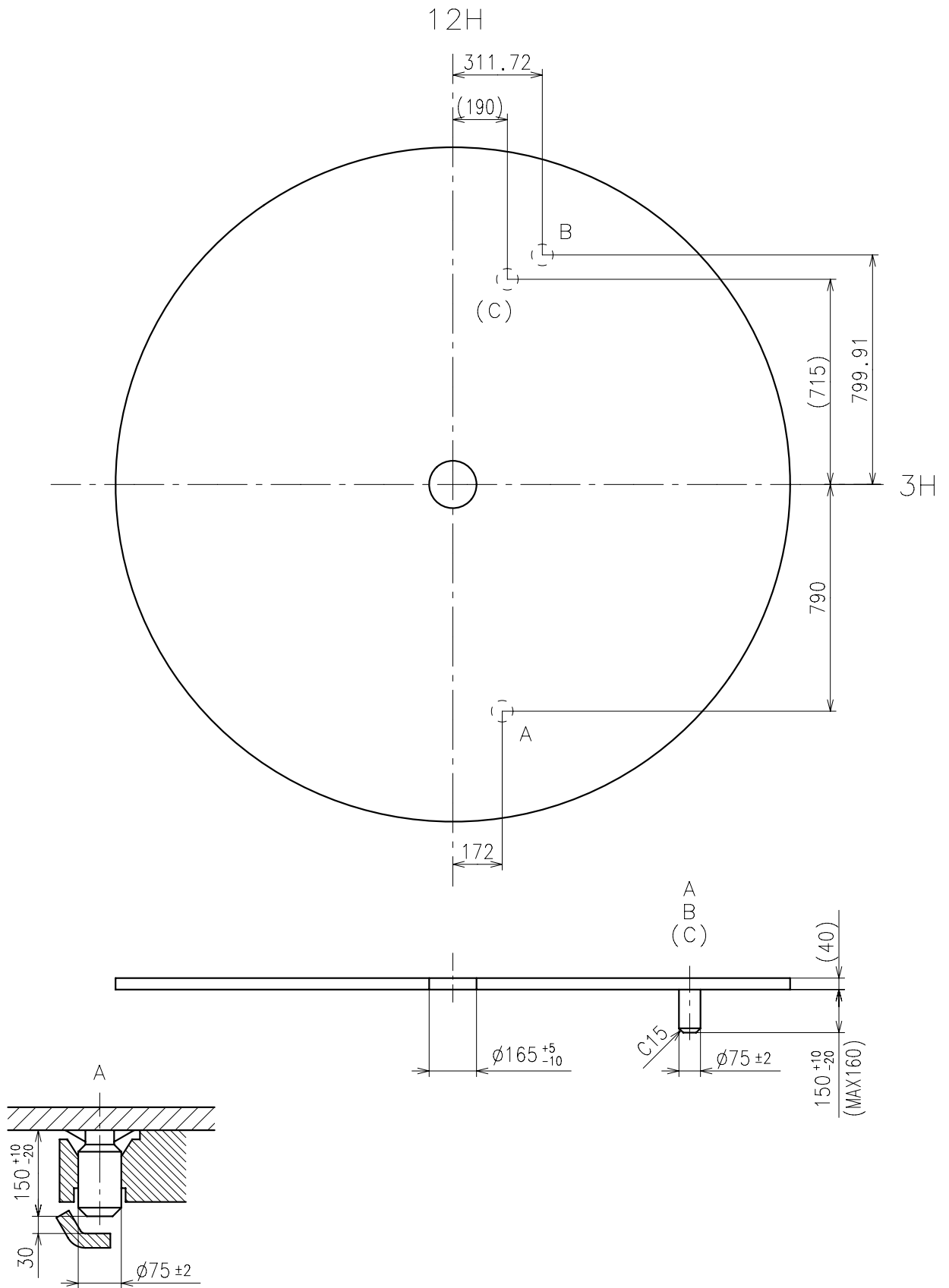


* Not threaded

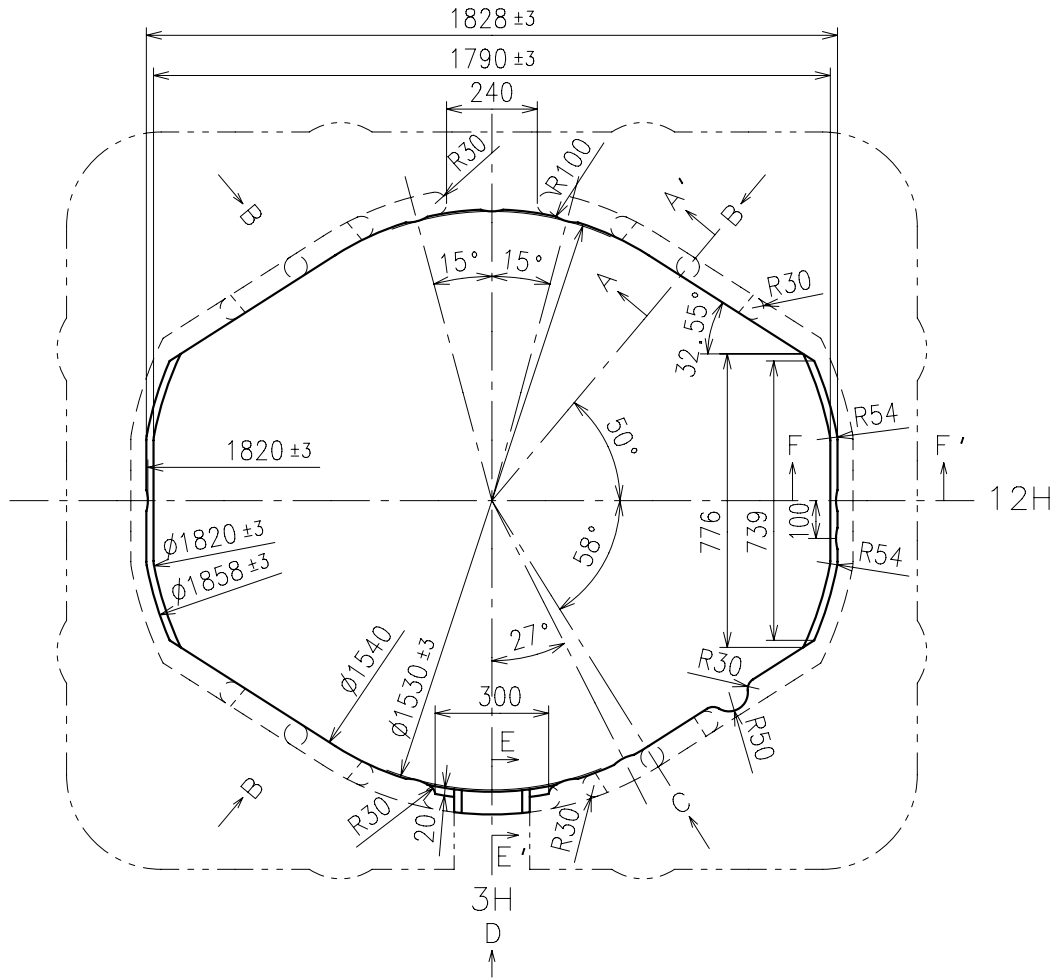
	Part No.	S1	S2	* S3	S4
Type-1 (Standard)	0354788	1473	1971	80	73
Type-2	0354787	1743	2246	887	78

Material : Steel

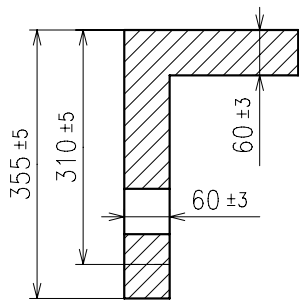
Hardness : Vickers 530±50



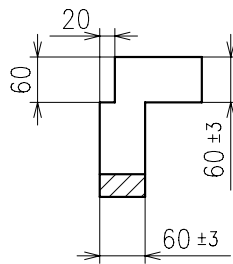
Use dial leg A-B(Main) or A-C(Sub)



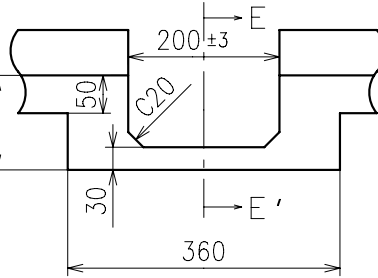
A-A' section



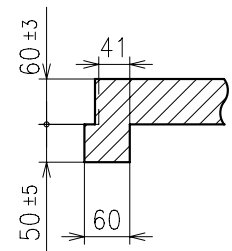
E-E' section



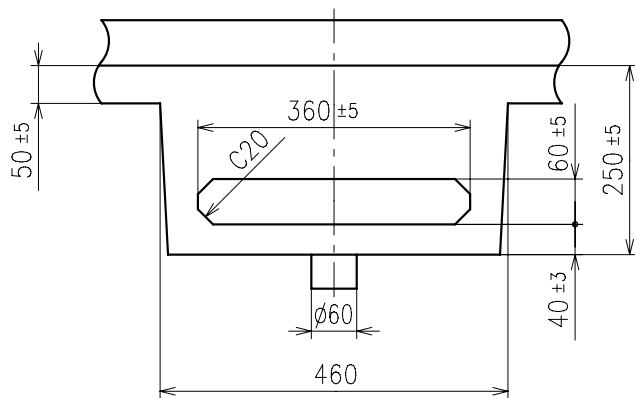
D view



F-F' section



B view



C view

