

Watch Movement Specification and Drawing

STANDARD

Cal. AL20E

Movement Size

6 3/4 × 8""

Casing Diameter

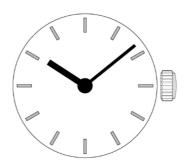
15.3 × 17.8 mm

Height

2.99mm

Battery Life

2 years



Date: 7/Aug./'20

Cal. AL20E

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Cal.

AL20E

Specifications

Date: 7/Aug./'20

Rev.: 04

Analog Quartz 6 3/4 × 8" Standard Series Movement / Two Hands (H/M)

1. MOVEMENT DIMENSIONS

Outside diameter $15.30 \text{mm}(3-9 \text{H}) \times 18.20 \text{mm}(12-6 \text{H})$ Casing diameter $15.30 \text{mm}(3-9 \text{H}) \times 17.80 \text{mm}(12-6 \text{H})$

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 $+50^{\circ}\text{C}$ 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 $: 0.6 \,\mu\,\text{N}\cdot\text{m}$ Hour hand $: 0.5 \,\mu\,\text{N}\cdot\text{m}$

5. BATTERY

Type / Size Silver oxide battery / ϕ 6.8mm × t 2.6mm Recommended battery SR626SW (Maxell, Murata, 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

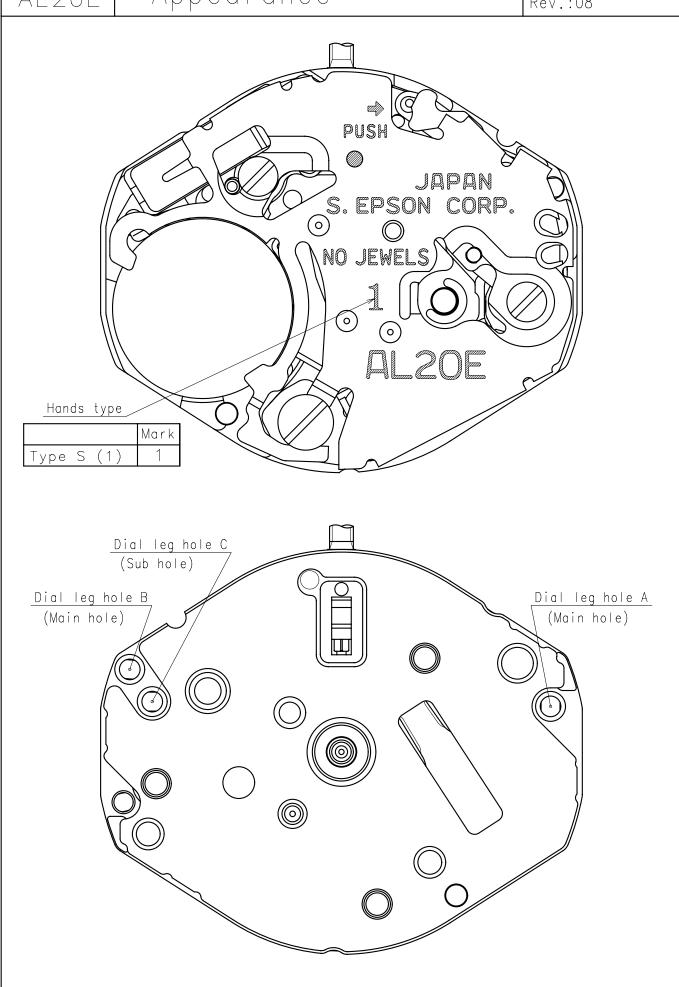
All specifications are subject to change without notice.

Cal. AL20E

Appearance

Date: 7/Apr./'17

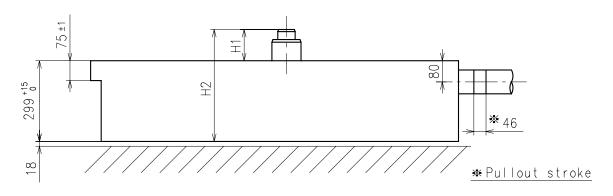
Rev.:08



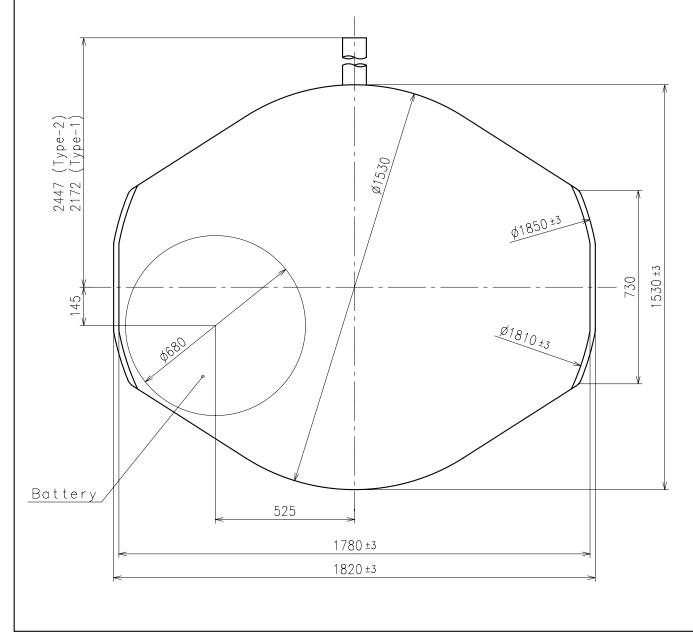


Date:30/Nov./'18

Rev.:03



Center post	Type S (1) AL20E1	
Maximum height from dial support	H1	118
Total height including movement	H2	417



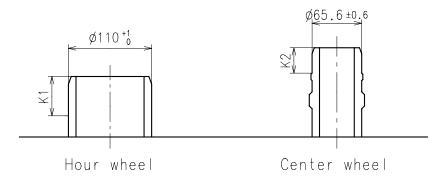
Cal. AL20E

Hand fitting

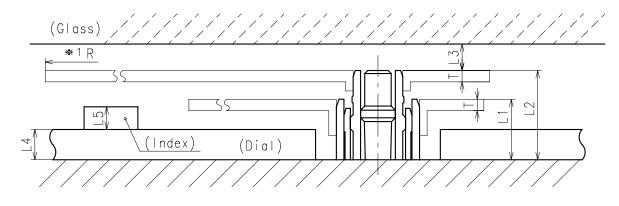
Date:20/Oct./'14

Rev.:05

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



	Part	Dimension		
	Hour wheel	Center wheel	K1	K2
Type S (1) AL20E1	0271796	0221797	52	33.5



	L 1	L2	L3	L4	L5	Т	*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.

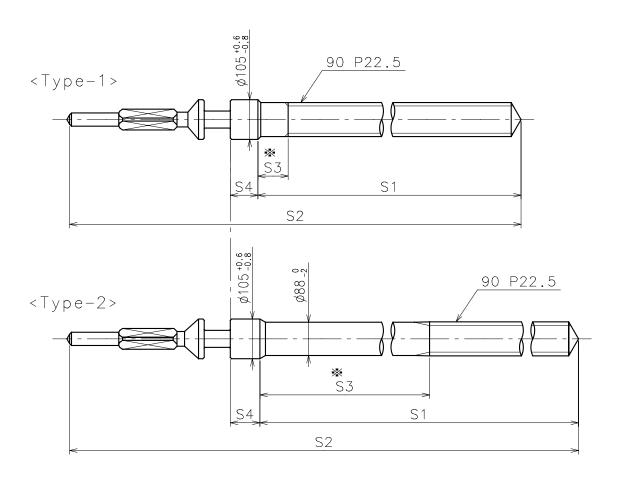
Unit: 1=1/100mm

Cal. AL20E

Hand setting stem

Date:27/Dec./'16

Rev.:05



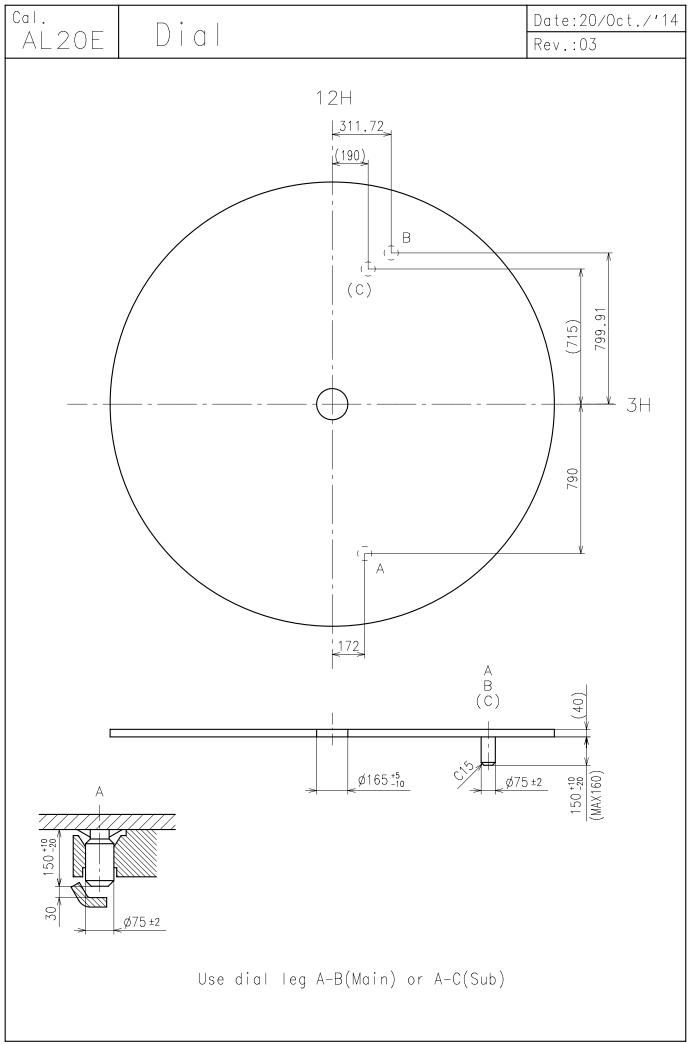
* Not threaded

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

Material : Steel

Hardness: Vickers 530±50

Unit: 1=1/100mm P. 5



Unit: 1=1/100mm P. 6

Cal. Date:20/Oct./'14 Casing ring AL20E Rev.:02 1828 ±3 1790 ±3 240 15° R30 ,R54 1820 ±3 12H $\begin{array}{c}
\phi 1820 \pm 3 \\
\hline
\phi 1858 \pm 3
\end{array}$ 739 R54 27 300 Ę 3H D F-F' section <u>D view</u> E-E' section A-A' section 60 ±3 200 ±3 E 60 ±3 125 ±5 § 50 √ 60 ±3 355 ±5 60 30 60 ±3 <u></u> ⊢ E ′ 60 ±3 360 B view C view 360 ±5 300 ±5 60 ±5 50 ±5 250 ±5 40±3 ø60 400

Unit: 1=1/100mm

460

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