

Watch Movement Specification and Drawing

SMALL SECOND

Cal. VL57B

Movement Size

13 1/2'''

Casing Diameter

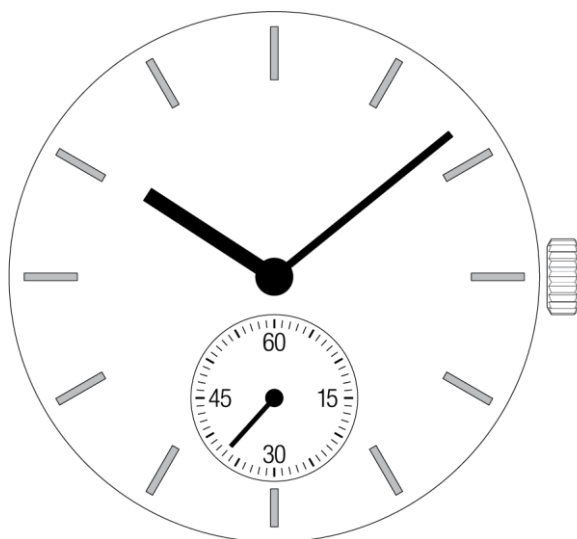
Ø 30.6mm

Height

3.97mm

Battery Life

5 years



Date: 4/Aug./'23

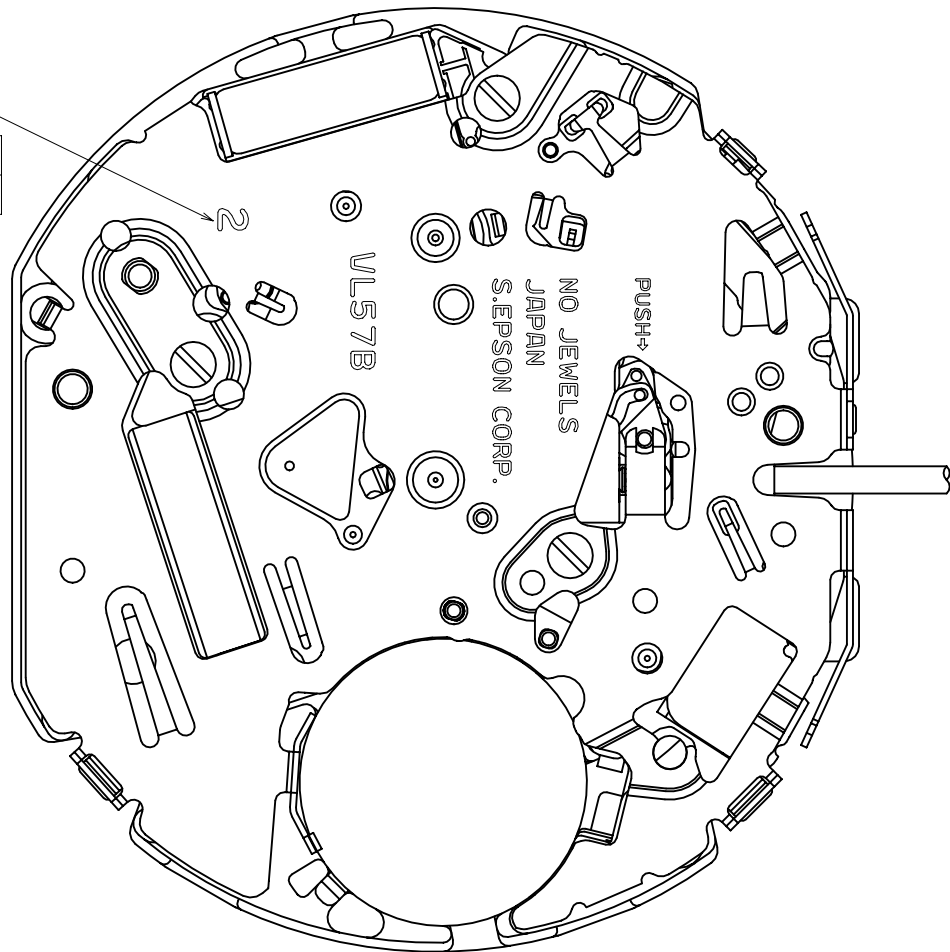
Cal. VL57B

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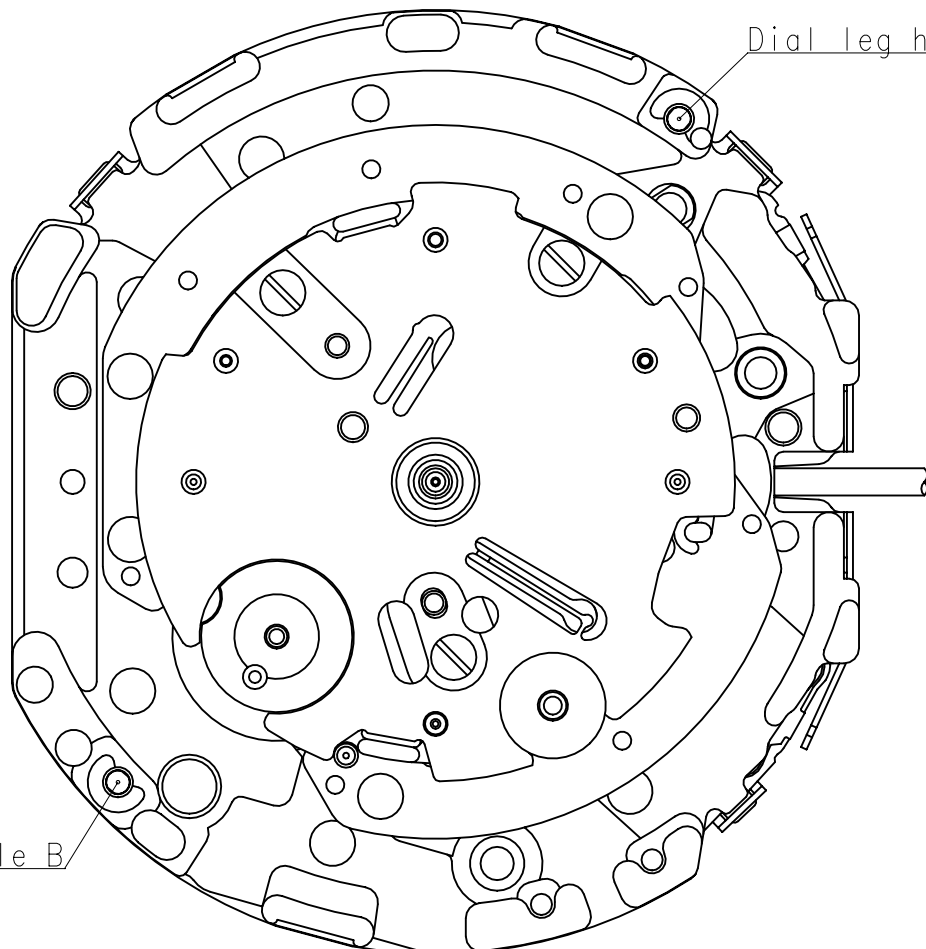
Cal.	VL57B	Specifications	Date : 7/Aug./'20
			Rev. : 01
Analog Quartz 13 1/2" Small second Movement			
1. MOVEMENT DIMENSIONS			
Outside diameter		ϕ 31.2mm × 28.0mm(3-9H)	
Casing diameter		ϕ 30.6mm	
Total height		3.97mm (including battery)	
2. TIME STANDARD			
Type of quartz oscillator		Tuning fork	
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	
Small hand		Small second (6H)	
Reset switch			
Power depletion warning function (BLD)			
(Small second hand moves at 2-second intervals)			
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		Hour hand	: 0.6 μ N·m
		Minute hand	: 0.9 μ N·m
		Small second hand	: 0.06 μ N·m
Moment of Inertia		Small second hand	: less than 0.05 μ g·m²
5. BATTERY			
Type / Size		Silver oxide battery / ϕ 9.5mm × t 2.0mm	
Recommended battery		SR920SW (Maxell, Murata, Seizaiken)	
Nominal voltage		1.55 V	
Battery life		Approx. 5 years	
Driving current consumption		Approx. 0.9 μ A	
Operation stopping voltage		1.1V	
6. SEPARATED PARTS (Parts code)			
Hand setting stem		0351578 or 0351177	
Battery		SR920SW	
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 M	2



Dial leg hole A



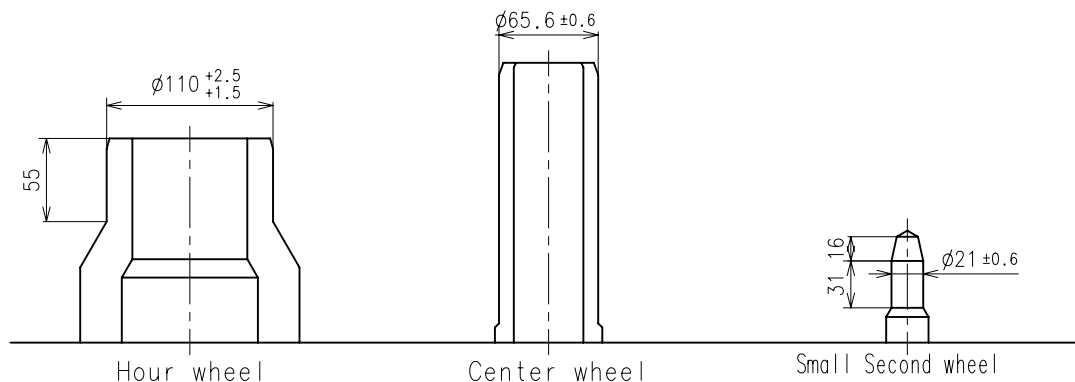
Dial leg hole B

※ Unbalance

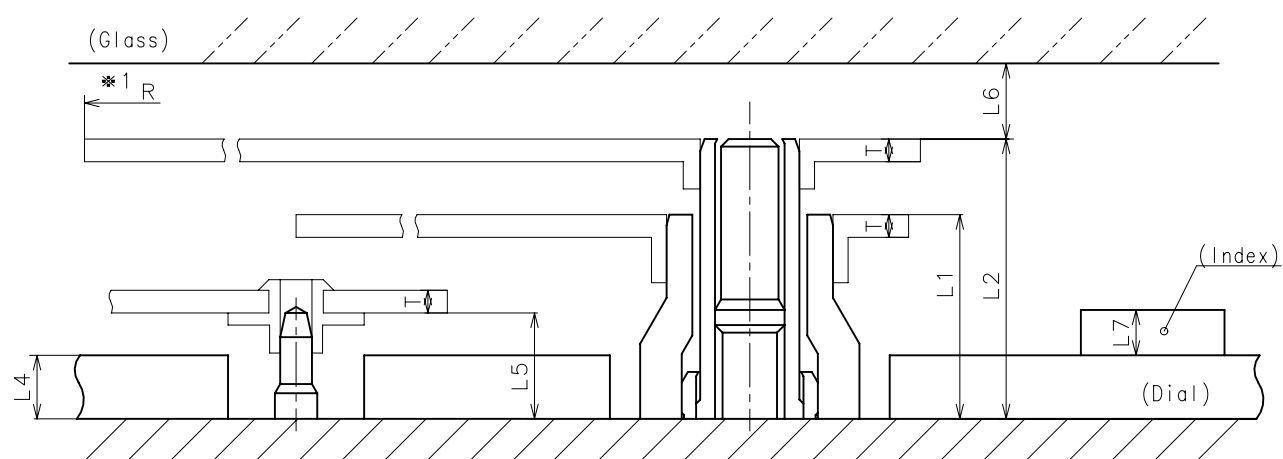
· Hour hand	$\leq 0.6\mu\text{ N}\cdot\text{m}$ ($60\mu\text{ g}\cdot\text{m}$)
· Minute hand	$\leq 0.9\mu\text{ N}\cdot\text{m}$ ($90\mu\text{ g}\cdot\text{m}$)
· Small Second hand	$\leq 0.06\mu\text{ N}\cdot\text{m}$ ($6\mu\text{ g}\cdot\text{m}$)

※ Moment of inertia

· Small Second hand	$\leq 0.05\mu\text{ g}\cdot\text{m}^2$
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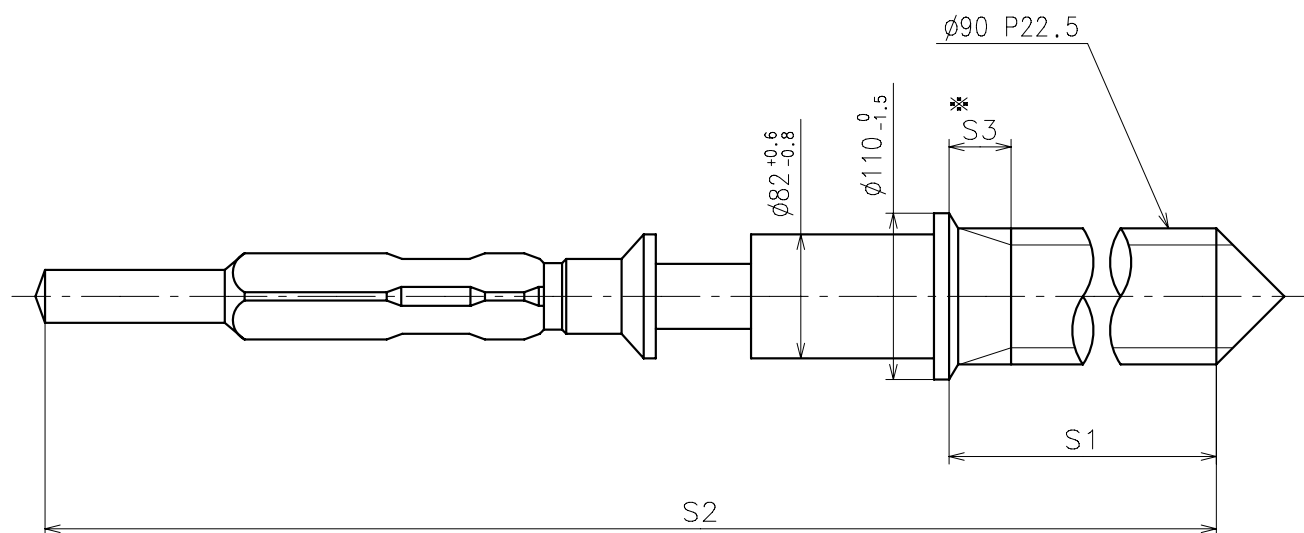


	Parts No.		
	Hour wheel	Center wheel	Small Second wheel
Type M (2) VL57B*	0271661	0221662	0888510



	L1	L2	L4	L5	L6	L7	T	*1 R
Type M (2) VL57B**	135	185	40	70	MIN: 50	MAX: 50	15	MAX: 1500

※ 1: It is the size taken into consideration for hands attachment.
Please observe some standard value specified in unbalance and moment of inertia when using long hands.

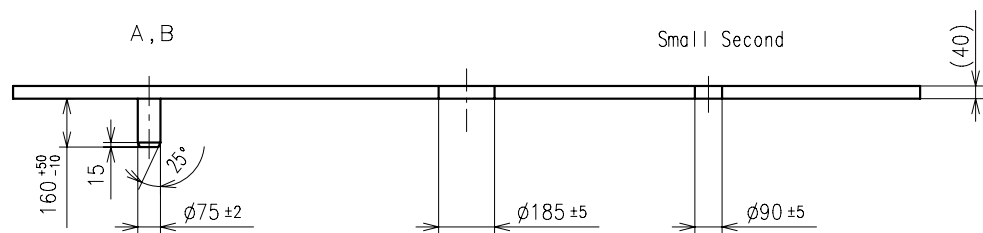
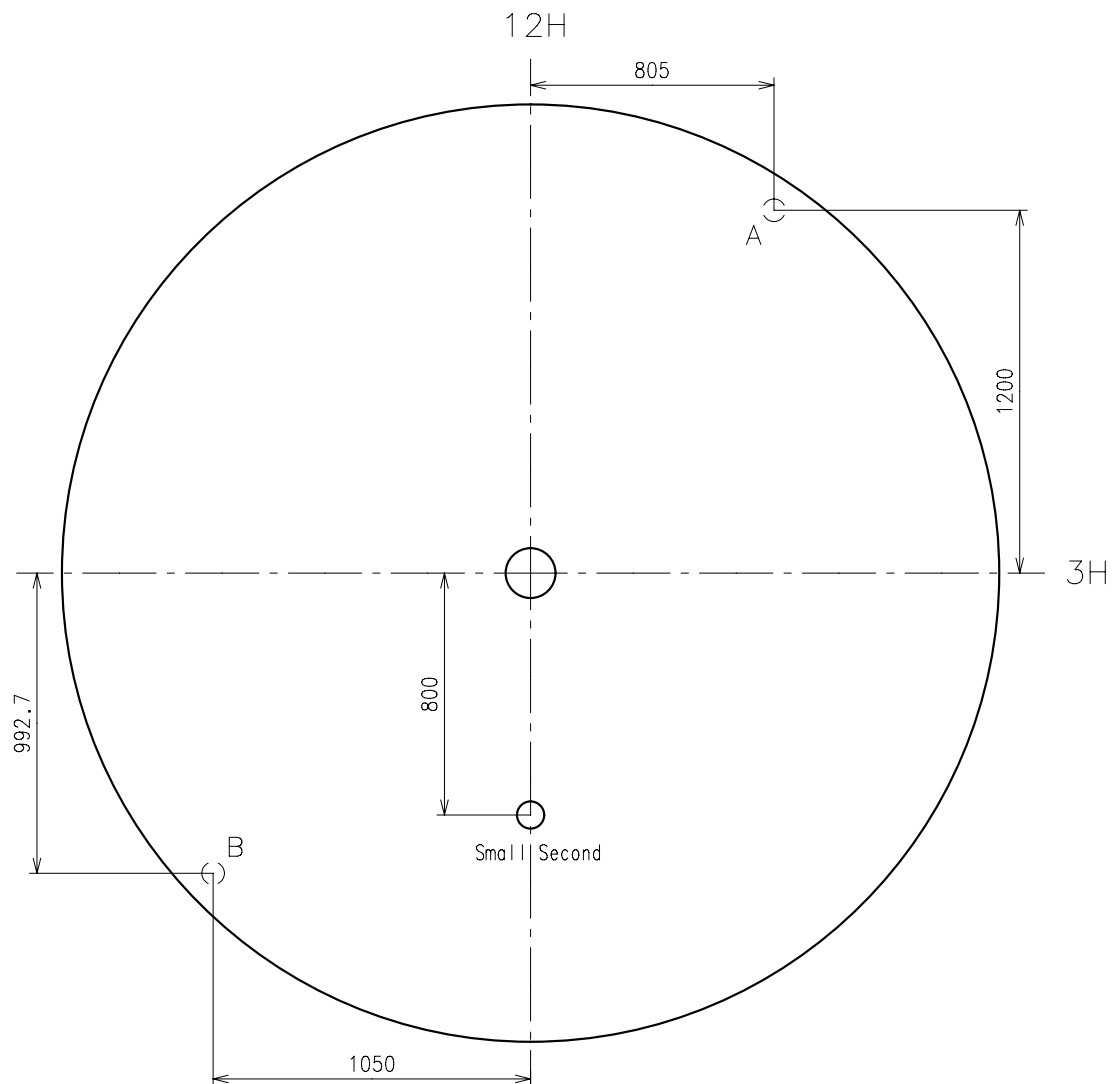


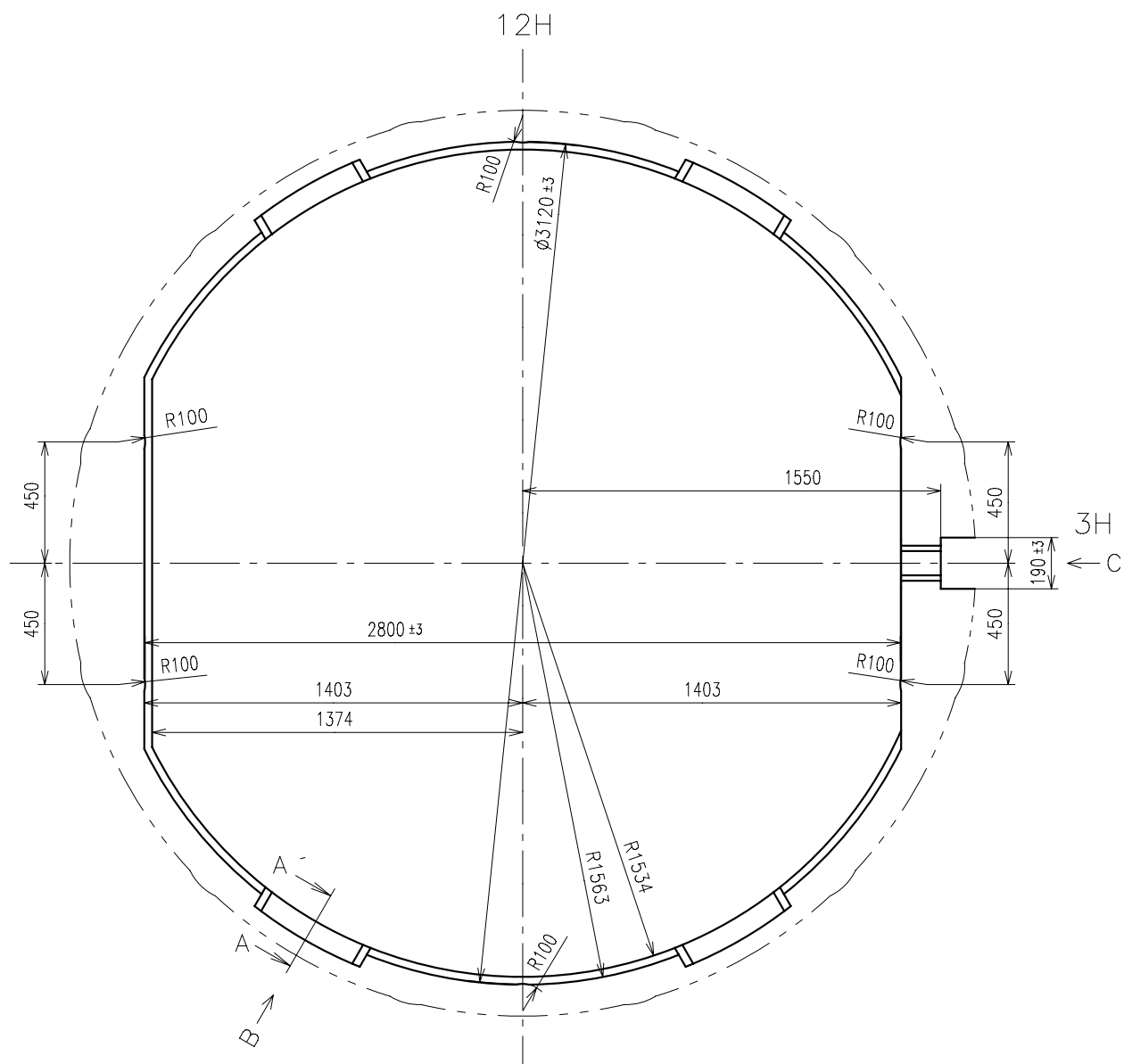
※ Not threaded

	Part No.	S1	S2	※ S3
Type-1	0351177	1366	1964	60
Type-2 (Standard)	0351578	2507	3105	650

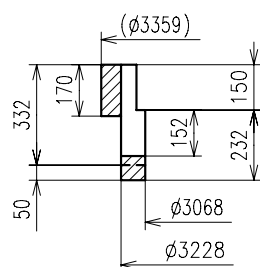
Material : Steel

Hardness : Vickers 600±50

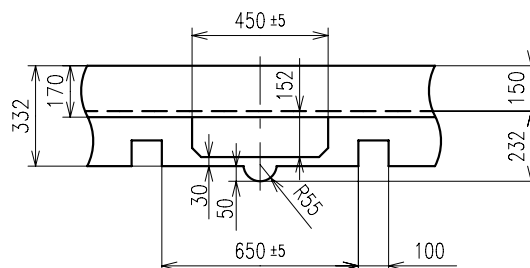




A-A' section



B view



C view

