

Watch Movement Specification and Drawing

SMALL SECOND

Cal. VL58B

Movement Size

13 1/2'''

Casing Diameter

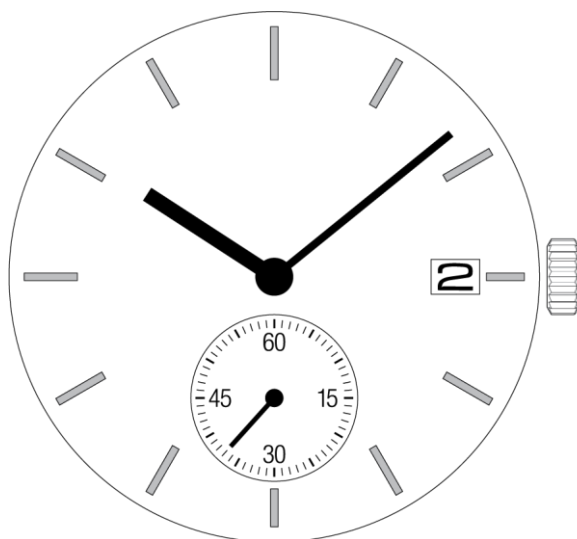
Ø 30.6mm

Height

3.97mm

Battery Life

5 years



Date: 4/Aug./'23

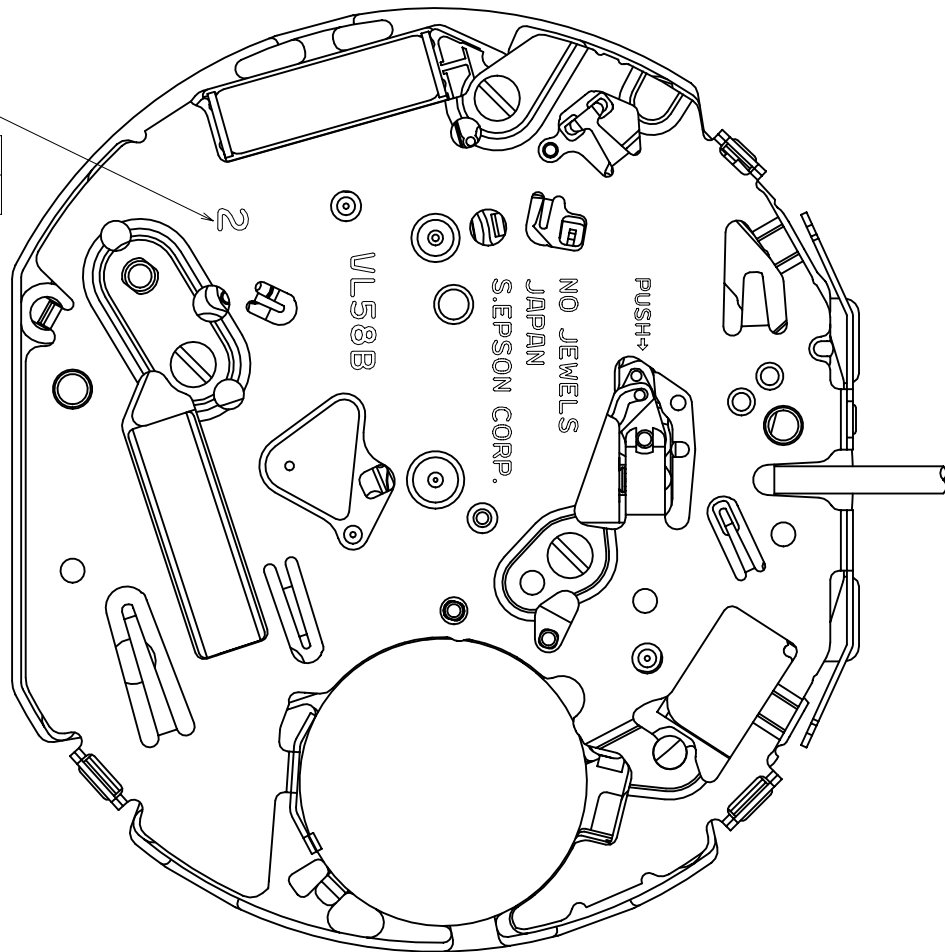
Cal. VL58B

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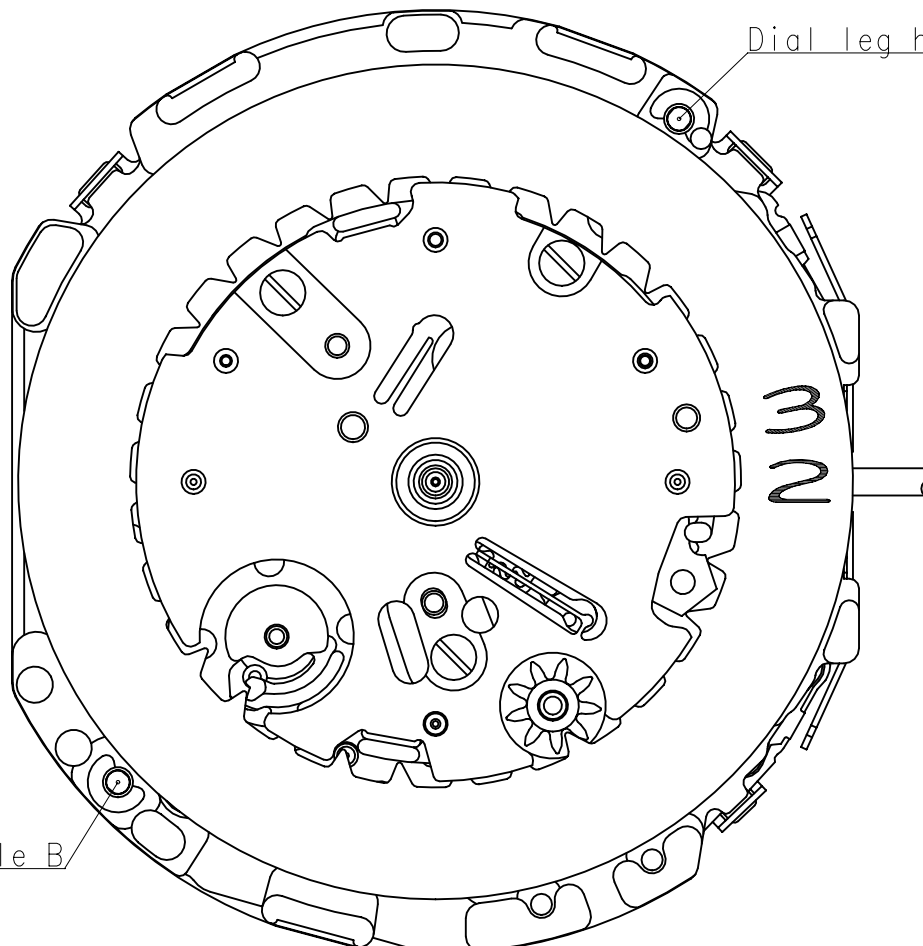
Cal.	VL58B	Specifications	Date : 7/Aug./'20
			Rev. : 01
Analog Quartz 13 1/2" Small second Movement with Date			
1. MOVEMENT DIMENSIONS			
Outside diameter	φ 31.2mm × 28.0mm(3-9H)		
Casing diameter	φ 30.6mm		
Total height	3.97mm (including battery)		
2. TIME STANDARD			
Type of quartz oscillator	Tuning 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 Hand	Hour / Minute		
Small hand	Small second (6H)		
Calendar	Instant setting device for date calendar		
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	: Instant date change	
	Crown pulled out 2nd 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



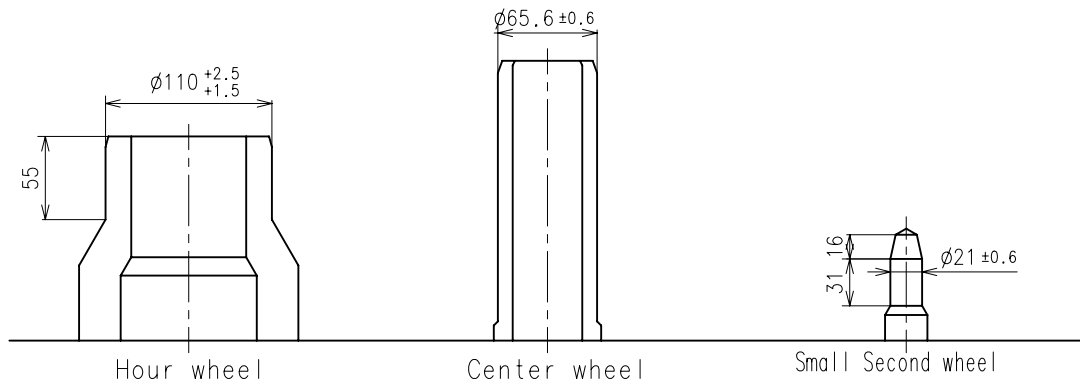
Dial leg hole B

※ Unbalance

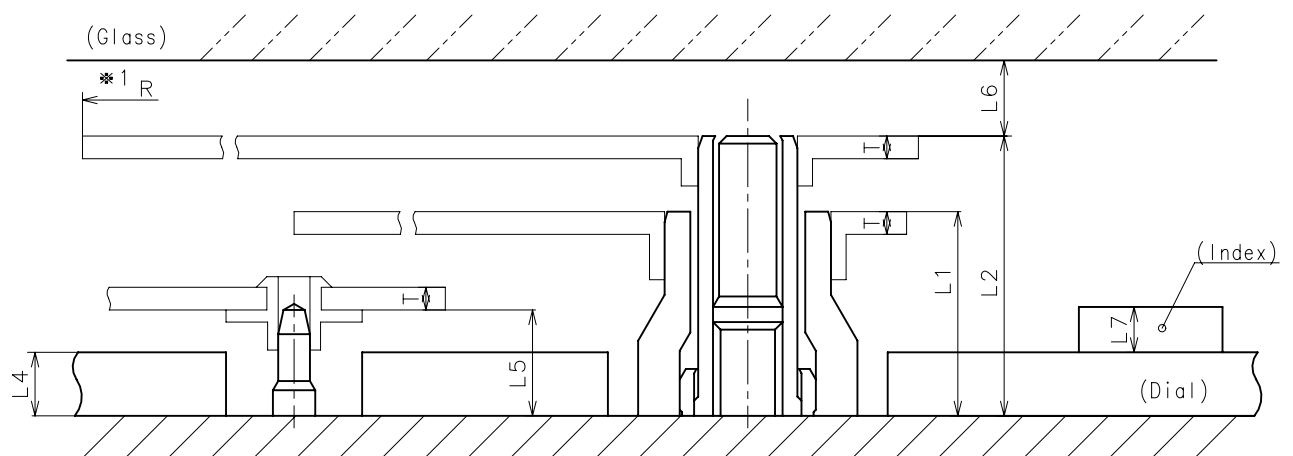
· Hour hand	$\leq 0.6\mu\text{ N}\cdot\text{m}$ ($60\mu\text{ g}\cdot\text{m}$)
· Minute hand	$\leq 0.9\mu\text{ N}\cdot\text{m}$ ($90\mu\text{ g}\cdot\text{m}$)
· Small Second hand	$\leq 0.06\mu\text{ N}\cdot\text{m}$ ($6\mu\text{ g}\cdot\text{m}$)

※ Moment of inertia

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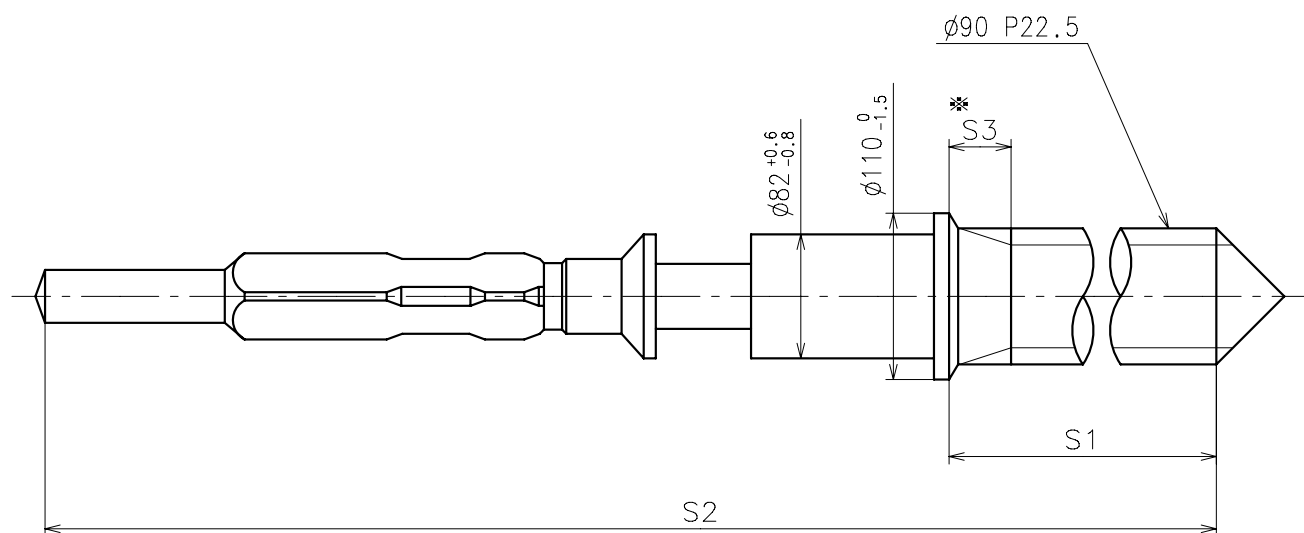


	Parts No.		
	Hour wheel	Center wheel	Small Second wheel
Type M (2) VL58B**	0271661	0221662	0888510



	L1	L2	L4	L5	L6	L7	T	*1 R
Type M (2) VL58B**	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.

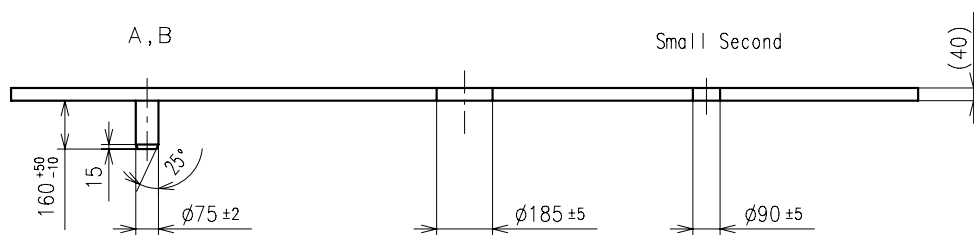
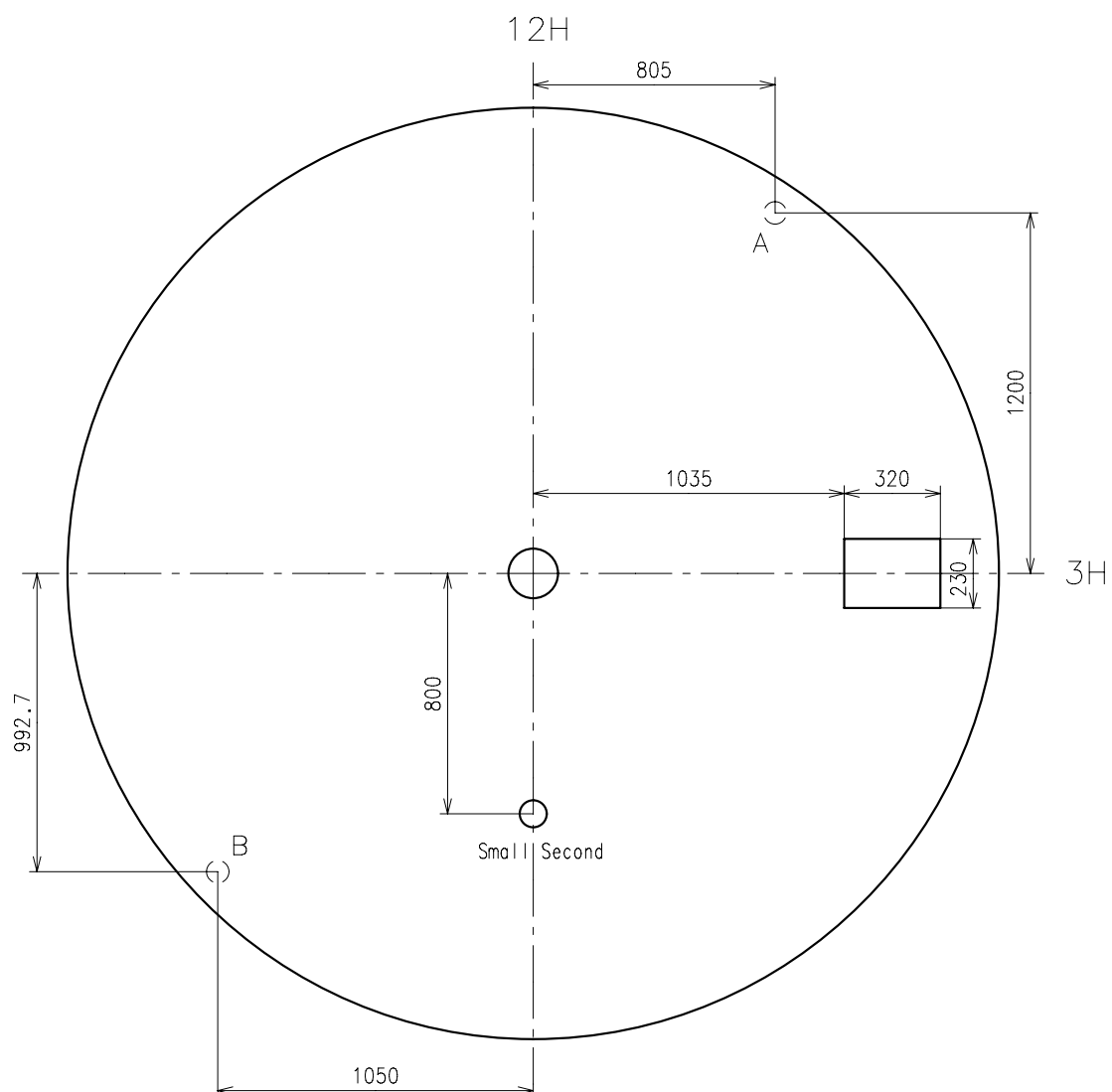


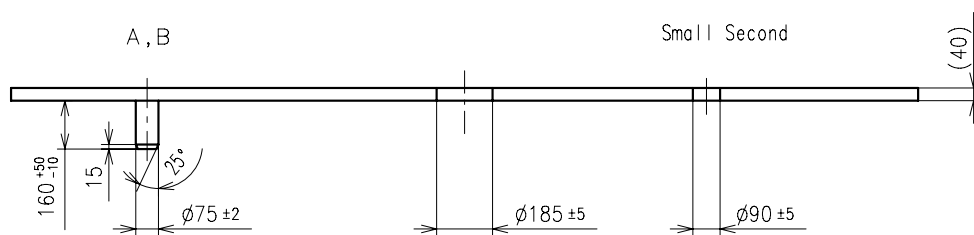
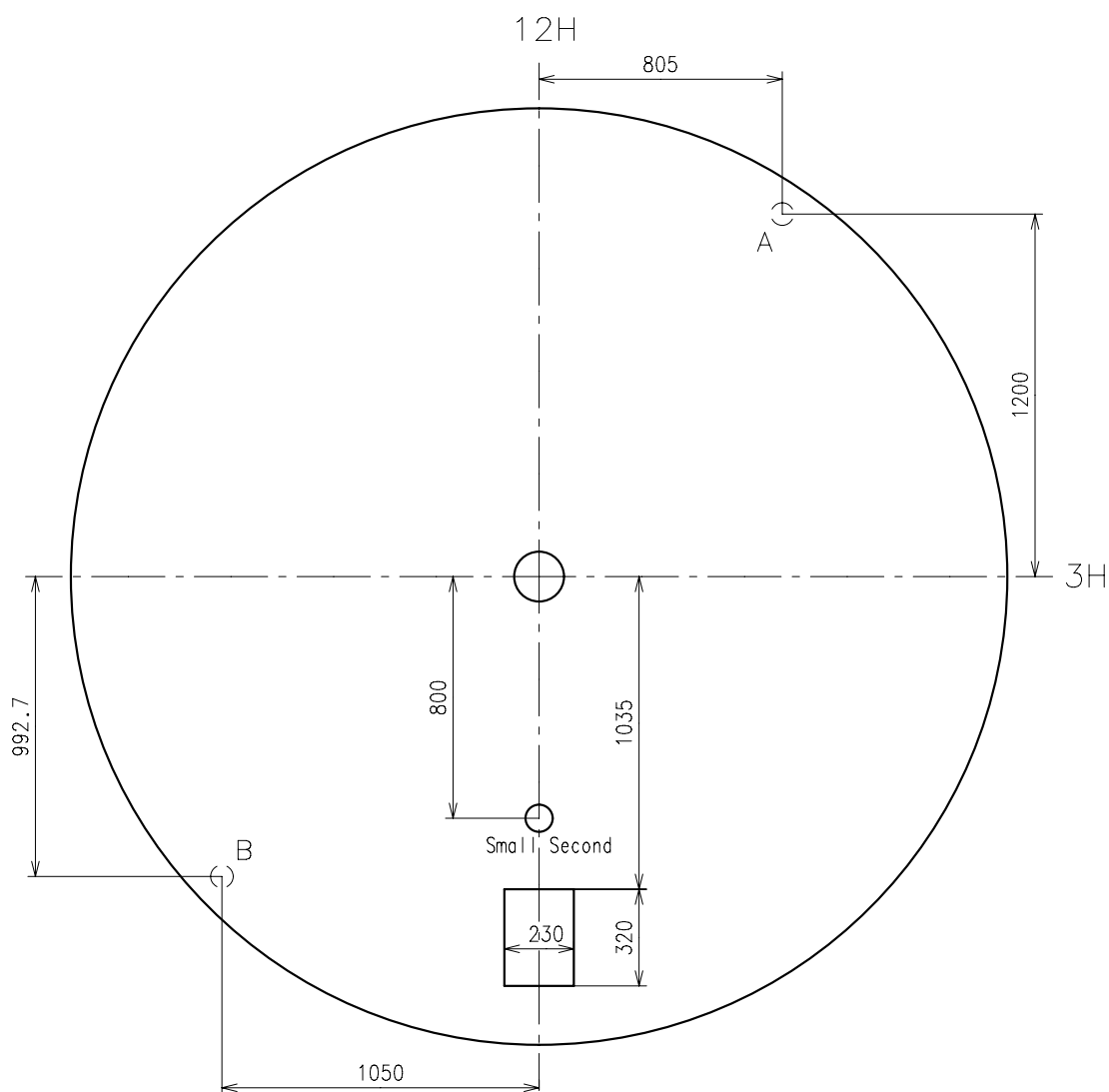
* Not threaded

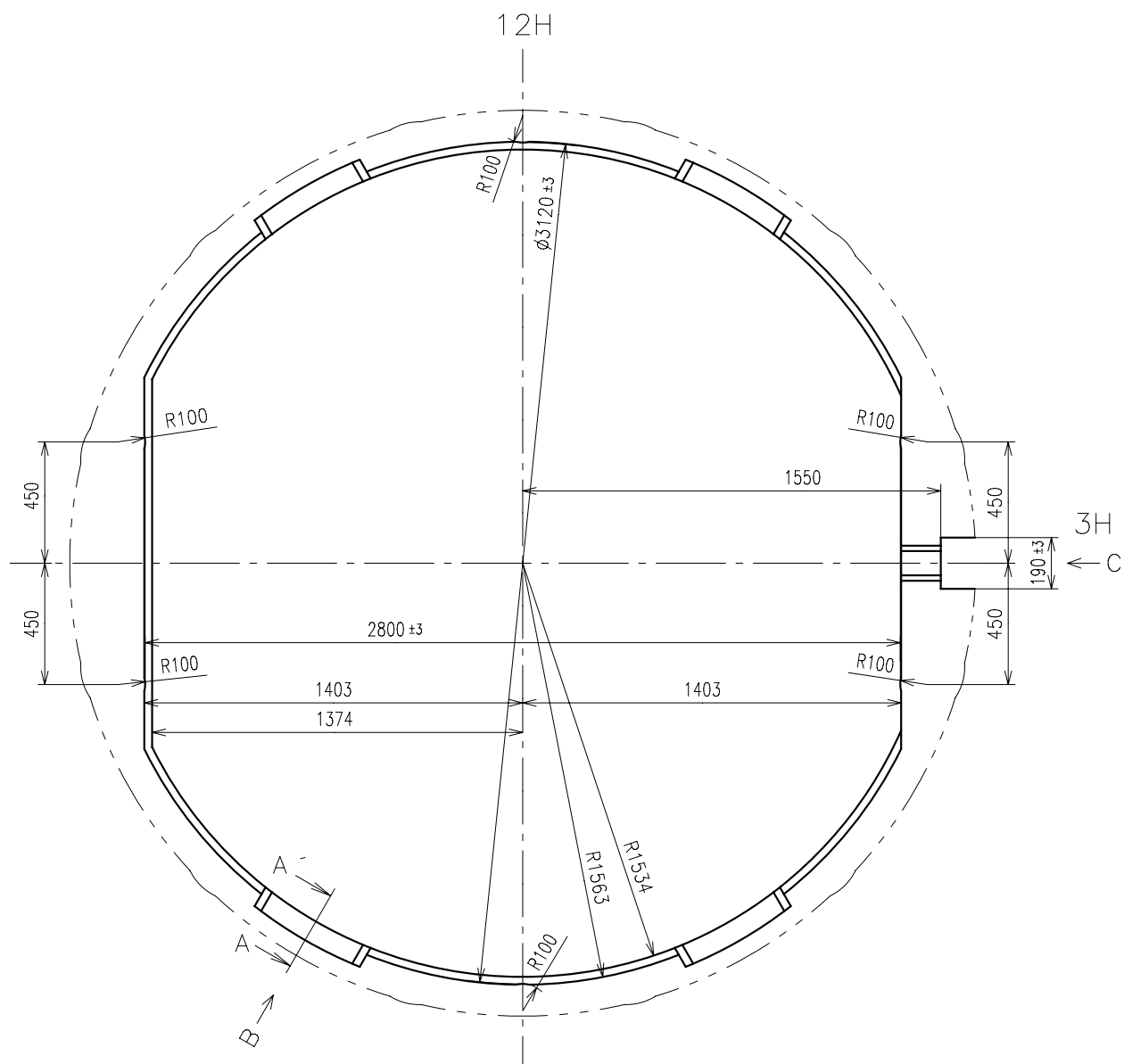
	Part No.	S1	S2	* S3
Type-1	0351177	1366	1964	60
Type-2 (Standard)	0351578	2507	3105	650

Material : Steel

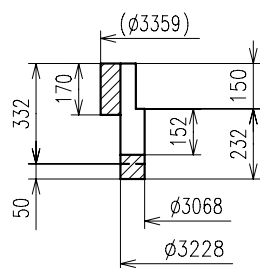
Hardness : Vickers 600 ± 50



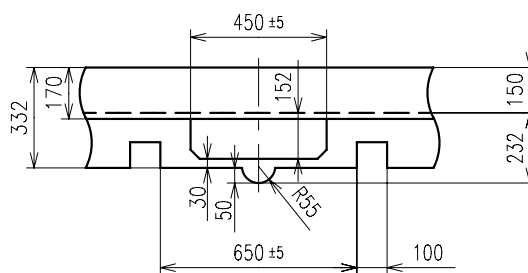




A-A' section



B view



C view

