

## Watch Movement Specification and Drawing

### CALENDAR

# Cal. VX33E

Movement Size

**10 1/2'''**

Casing Diameter

**Ø 23.3mm**

Height

**2.98mm**

Battery Life

**3 years**

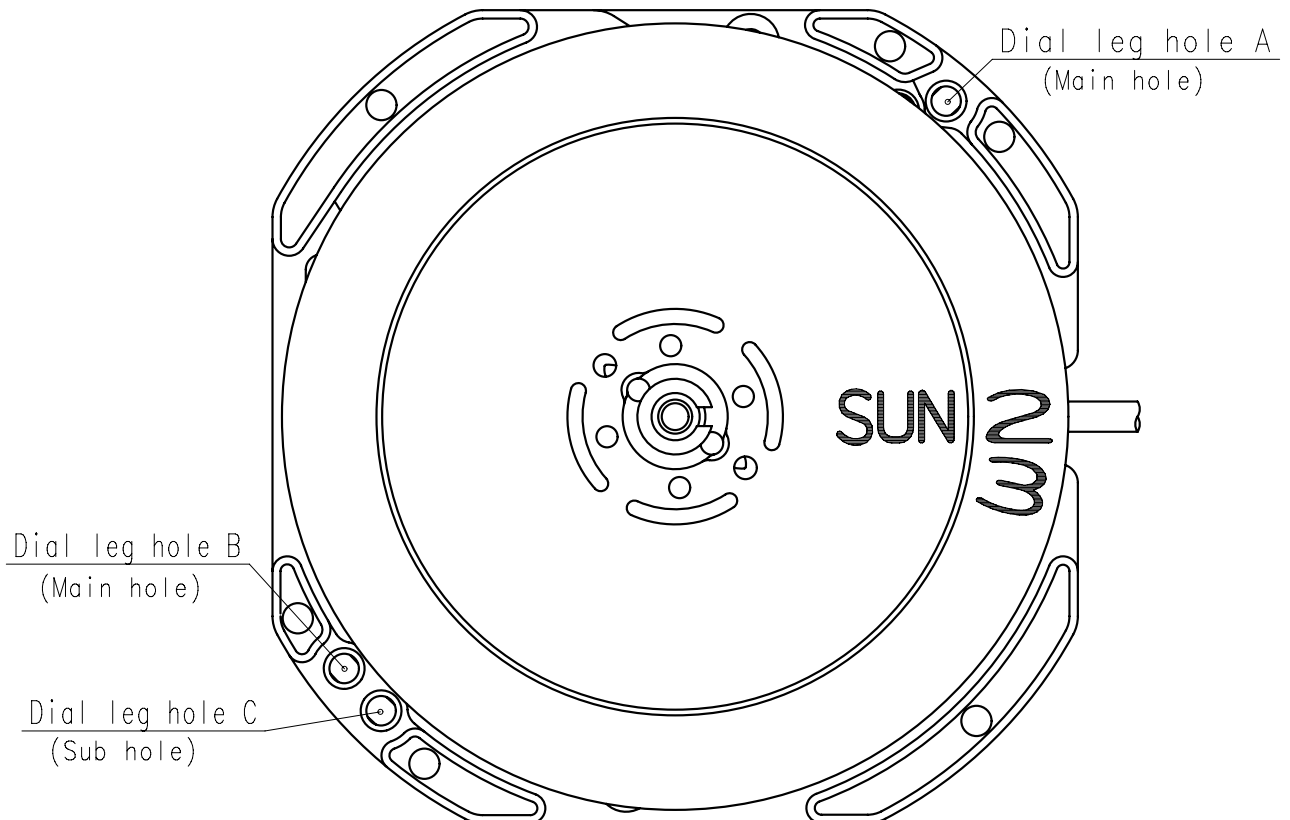
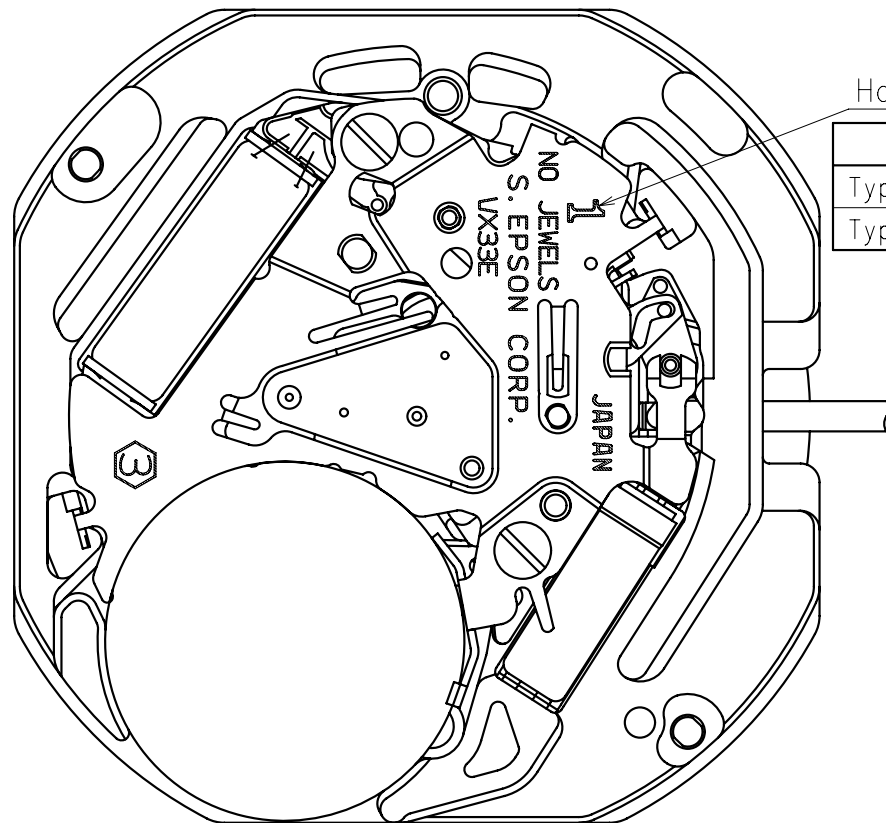


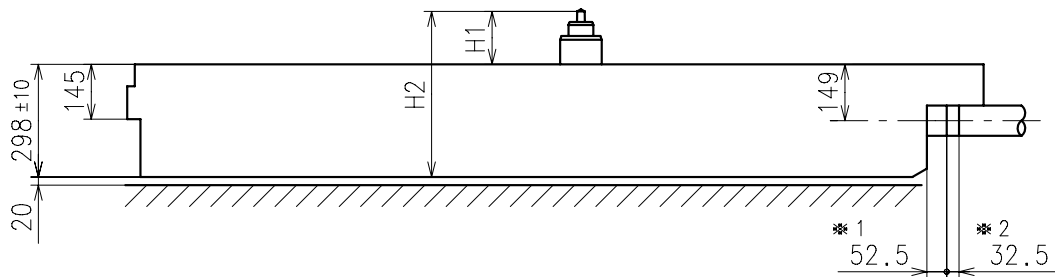
Date: 4/Aug./'23

# Cal. VX33E

| Items             | Rev. | Page |
|-------------------|------|------|
| Specifications    | 04   | 1    |
| Appearance        | 04   | 2    |
| Casing            | 05   | 3    |
| Hand fitting      | 05   | 4    |
| Hand setting stem | 04   | 5    |
| Dial-01           | 02   | 6-01 |
| Dial-03           | 01   | 6-03 |
| Dial-05           | 01   | 6-05 |
| Dial-06           | 01   | 6-06 |
| Dial-09           | 01   | 6-09 |
| Dial-11           | 01   | 6-11 |
| Dial-12           | 01   | 6-12 |
| Dial-16           | 01   | 6-16 |
| Dial-20           | 01   | 6-20 |
| Dial-24           | 02   | 6-24 |
| Dial-25           | 01   | 6-25 |
| Dial-26           | 02   | 6-26 |
| Casing ring       | 02   | 7    |

|  |  |                             |                    |
|--|--|-----------------------------|--------------------|
| Cal.   | VX33E  | Specifications              | Date : 18/Sep./'20 |
|  |  |                             | Rev. : 04          |
| Analog Quartz 10 1/2''' Slim Movement / Three hands(H/M/S) with Day / Date |  |                             |                    |
| 1. MOVEMENT DIMENSIONS   |  |                             |                    |
| Outside diameter   | φ 24.00mm × 21.30mm(3-9H) × 21.50mm(12-6H)                                   |                             |                    |
| Casing diameter  | φ 23.30mm × 21.30mm(3-9H) × 21.50mm(12-6H)                                   |                             |                    |
| Total height   | 2.98mm (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   |  |                             |                    |
| 3 Hands  | Hour / Minute / Second   |                             |                    |
| Day / Date   | Instant setting device for day / date calendar                               |                             |                    |
| Reset switch   |  |                             |                    |
| Setting mechanism  | Crown at normal position   | : Free                      |                    |
|  | Crown pulled out 1st click   | : Instant day / 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  | : 0.5 μ N·m                 |                    |
|  | Minute hand  | : 0.6 μ N·m                 |                    |
|  | Second hand  | : 0.07 μ N·m                |                    |
| 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. 3 years  |                             |                    |
| Driving current consumption  | Approx. 1.6 μ A  |                             |                    |
| Operation stopping voltage   | 1.1 V  |                             |                    |
| 6. SEPARATED PARTS (Parts code)  |  |                             |                    |
| Hand setting stem  | 0351177 or 0351578   |                             |                    |
| Battery  | SR920SW  |                             |                    |
| 7. TEST OF ACCURACY  |  |                             |                    |
| Equipment to be used   | SEIKO quartz tester QT-99,<br>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.                   |  |                             |                    |

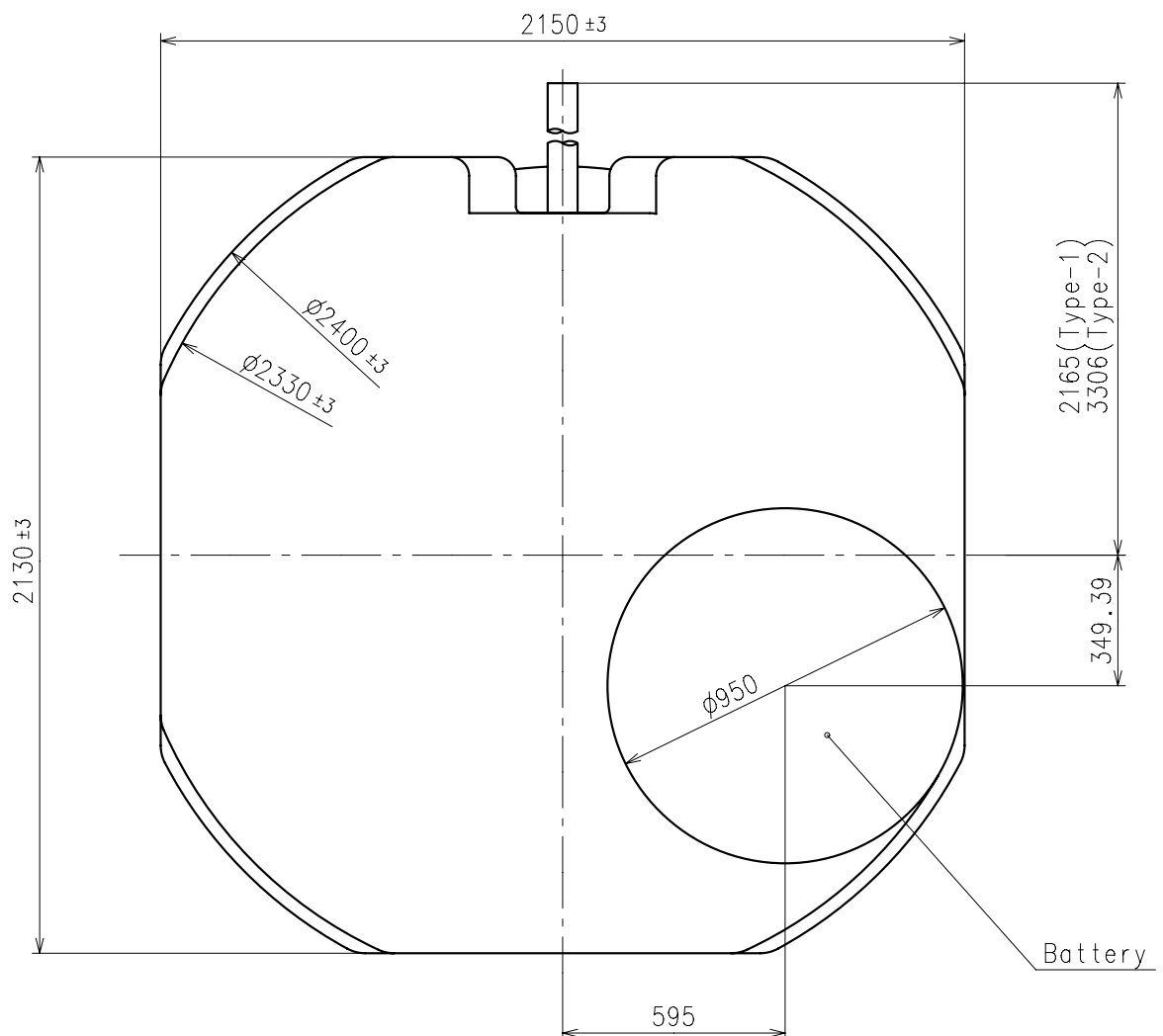




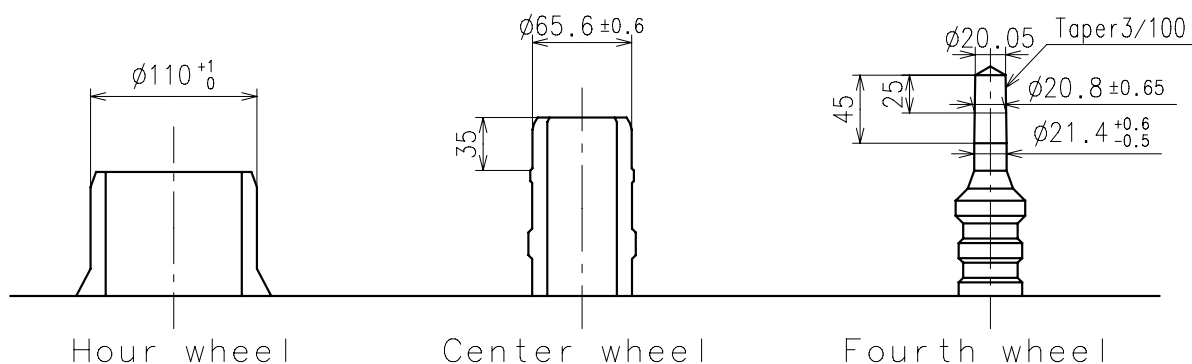
| Center post                         |    | Type S (1)<br>VX33E1** | Type M (2)<br>VX33E2** |
|-------------------------------------|----|------------------------|------------------------|
| Maximum height from<br>dial support | H1 | 146                    | 182                    |
| Total height<br>including movement  | H2 | 444                    | 480                    |

\*1:First pullout stroke

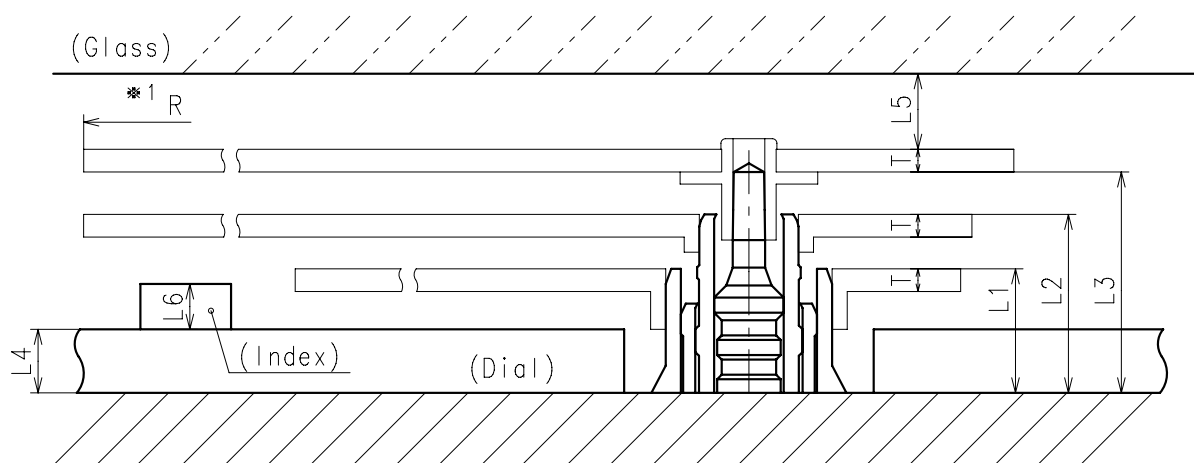
\*2:Second pullout stroke



- \* Hour hand unbalance  $\leq 0.5\mu\text{ N}\cdot\text{m}$  ( $50\mu\text{ g}\cdot\text{m}$ )
- \* Minute hand unbalance  $\leq 0.6\mu\text{ N}\cdot\text{m}$  ( $60\mu\text{ g}\cdot\text{m}$ )
- \* Second hand unbalance  $\leq 0.07\mu\text{ N}\cdot\text{m}$  ( $7\mu\text{ g}\cdot\text{m}$ )

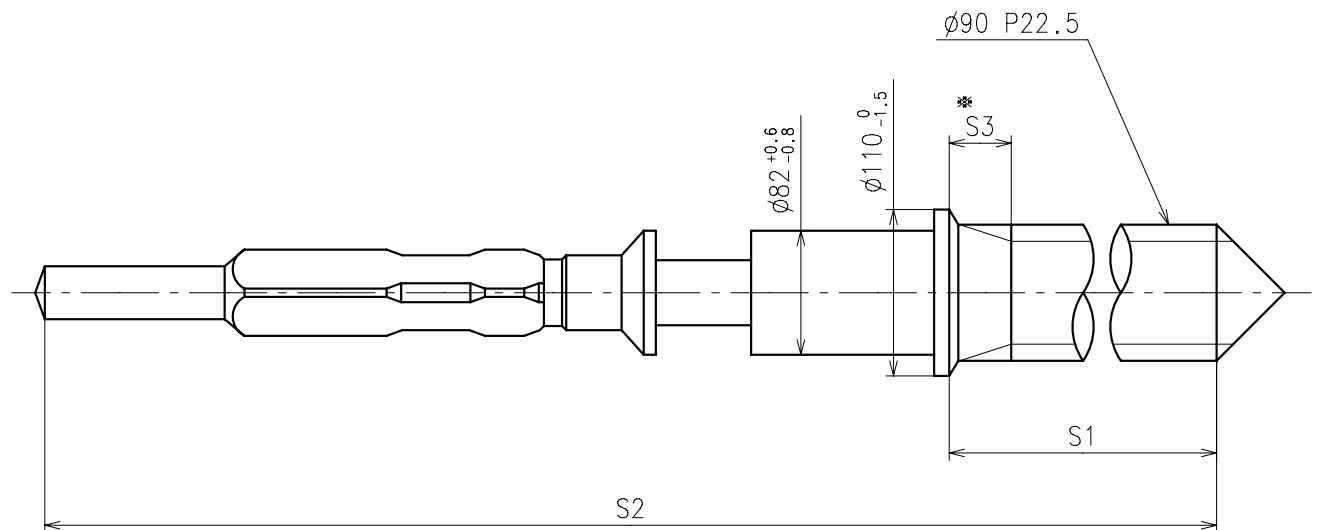


|                        | Parts No.  |              |              |
|------------------------|------------|--------------|--------------|
|                        | Hour wheel | Center wheel | Fourth wheel |
| Type S (1)<br>VX33E1** | 0271904    | 0221904      | 0241904      |
| Type M (2)<br>VX33E2** | 0271934    | 0221934      | 0241934      |



|                        | L1  | L2  | L3  | L4 | L5         | L6         | T  | *1 R         |
|------------------------|-----|-----|-----|----|------------|------------|----|--------------|
| Type S (1)<br>VX33E1** | 82  | 118 | 146 | 40 | MIN:<br>50 | MAX:<br>35 | 15 | MAX:<br>1250 |
| Type M (2)<br>VX33E2** | 105 | 154 | 182 | 40 | MIN:<br>50 | MAX:<br>60 | 15 | MAX:<br>1250 |

\*1: It is the size taken into consideration for hands attachment.  
Please observe some standard value specified in unbalance when using long hands.

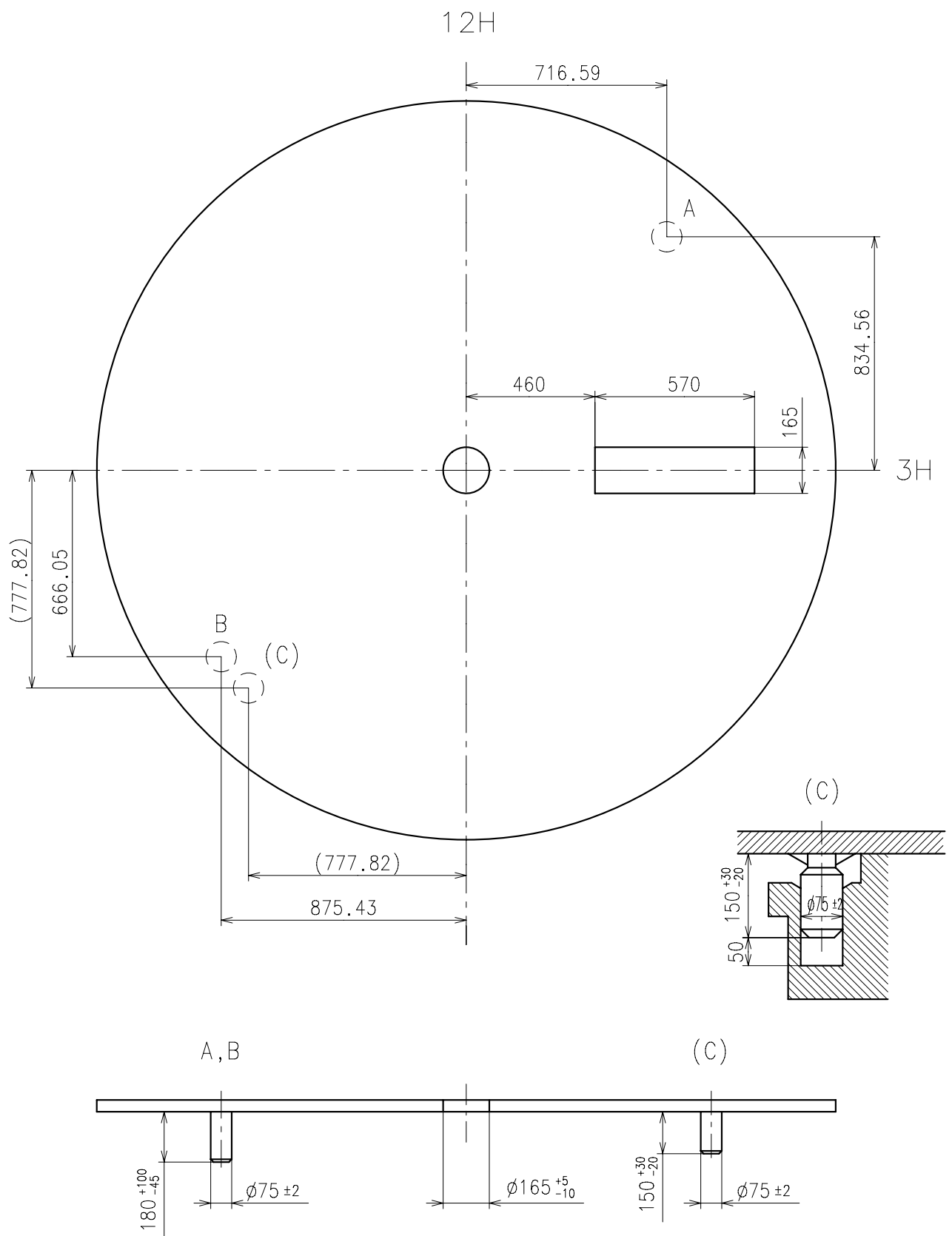


※ Not threaded

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

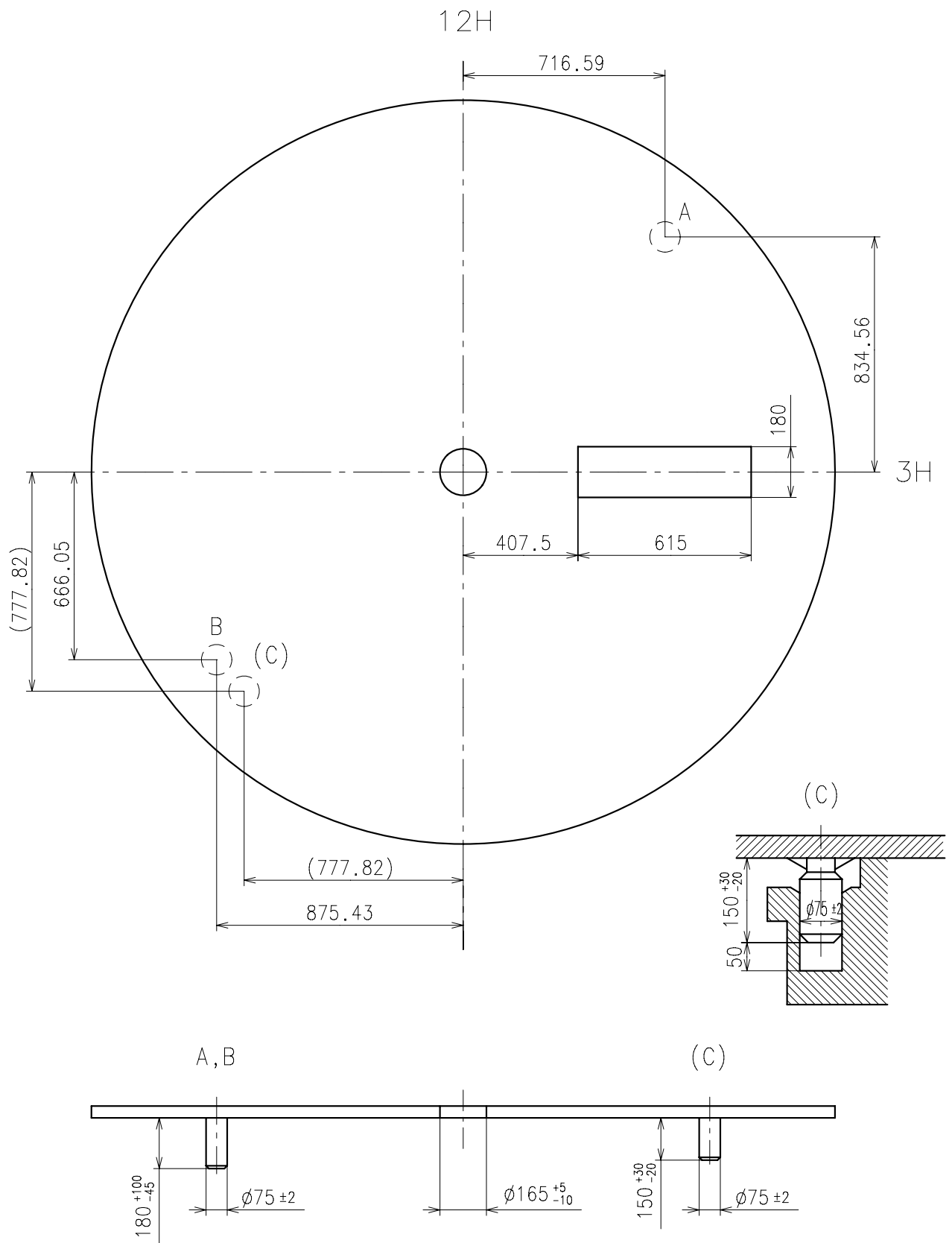
Material : Steel

Hardness : Vickers 600±50

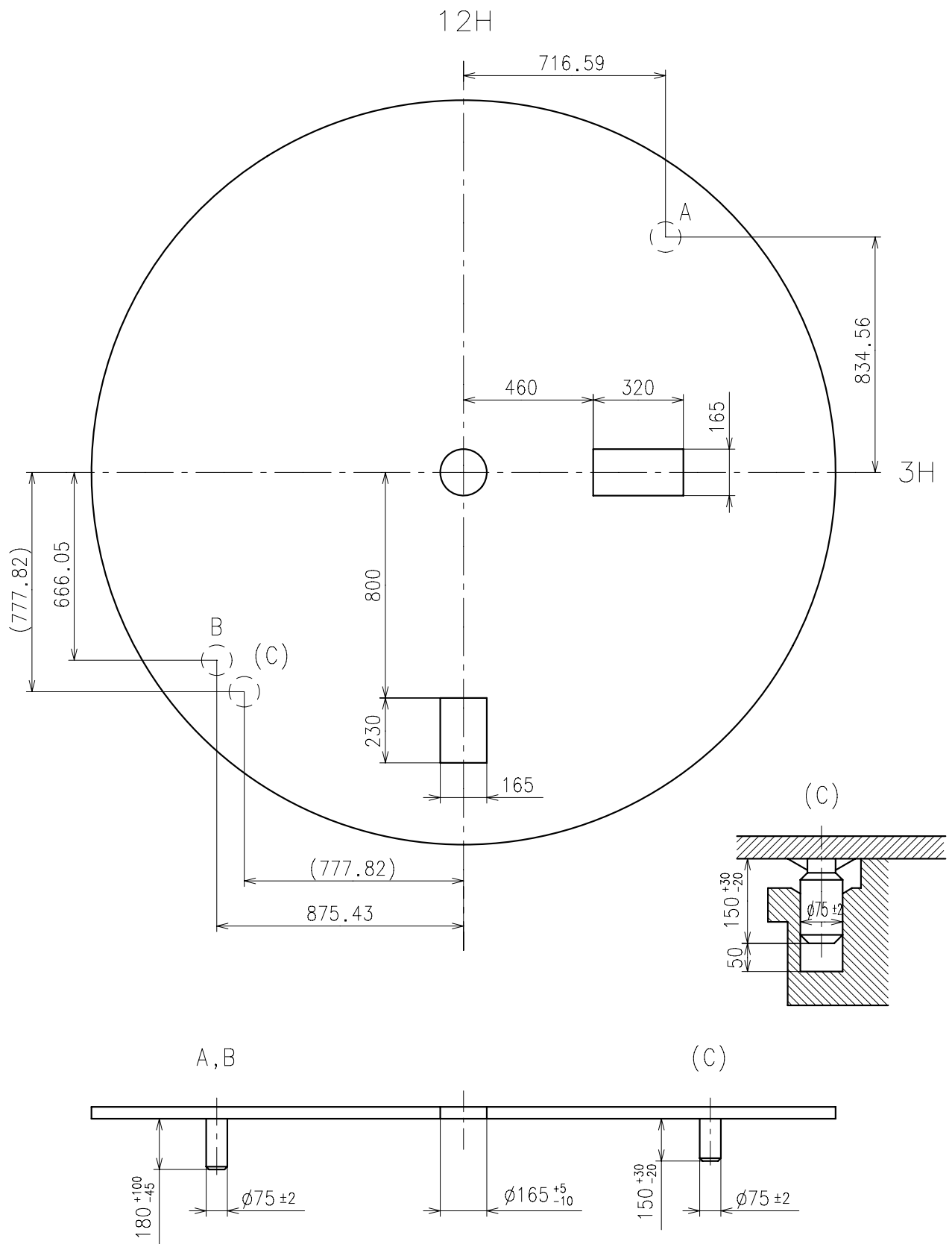


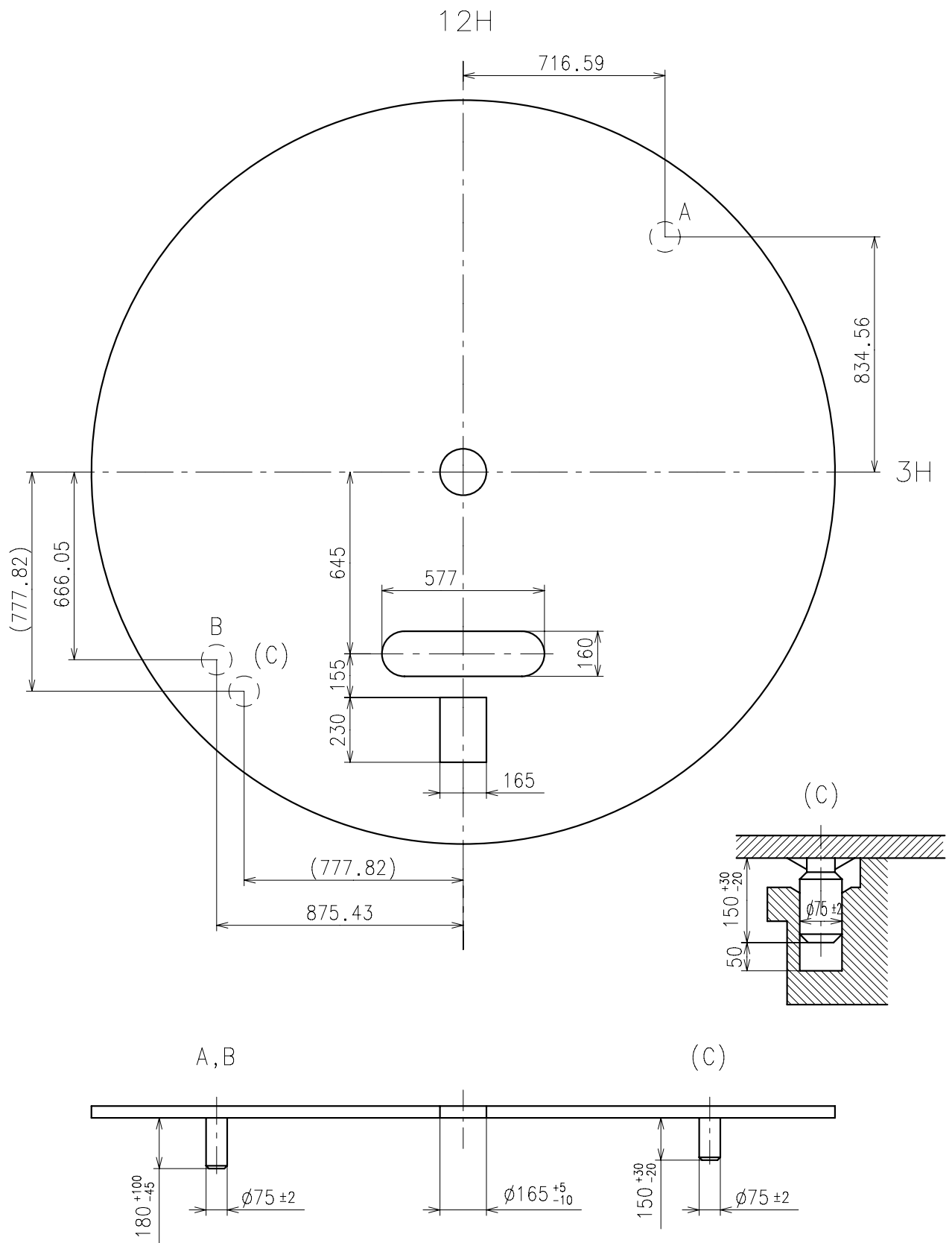
※ Use dial leg A-B or (A-C)



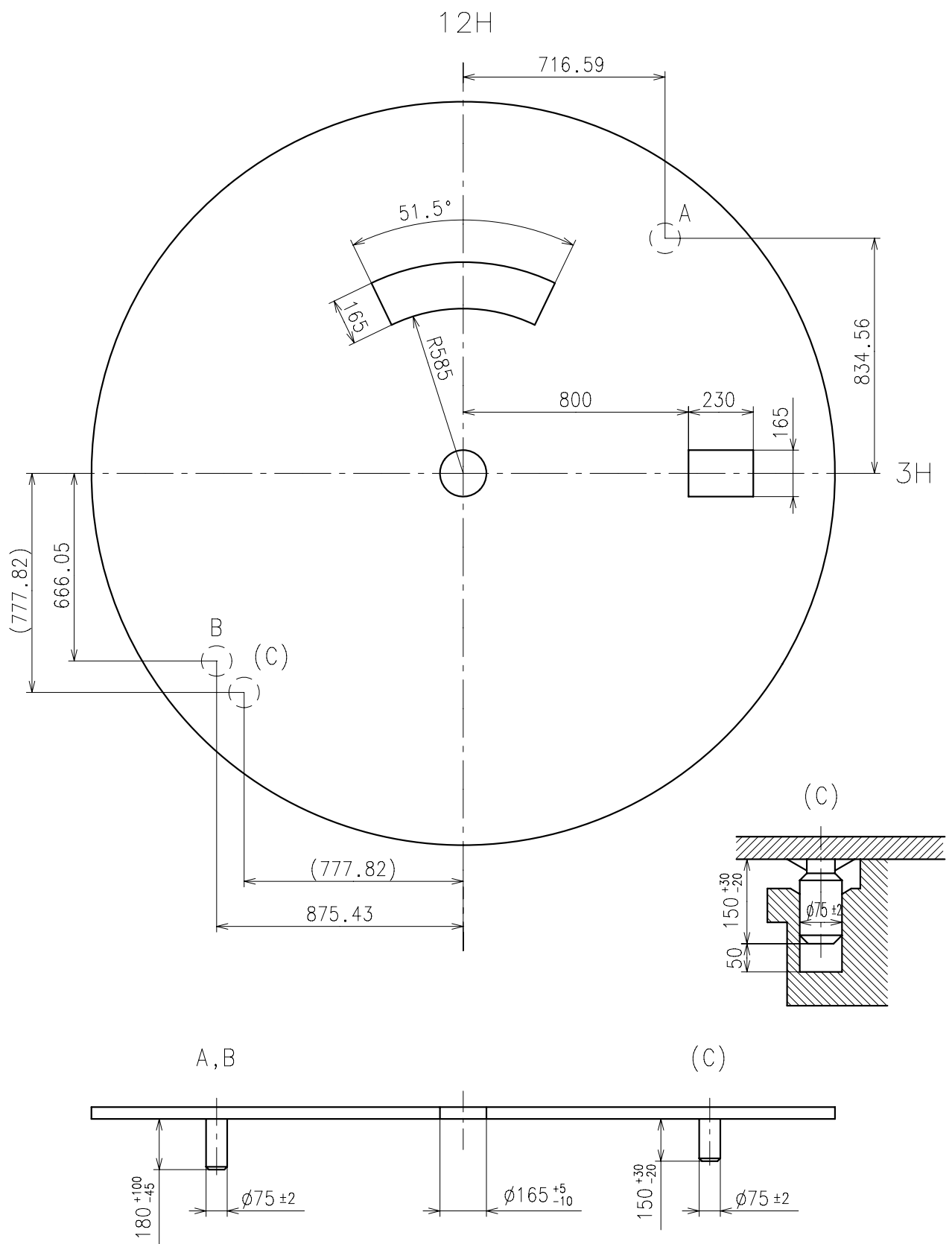


※ Use dial leg A-B or (A-C)

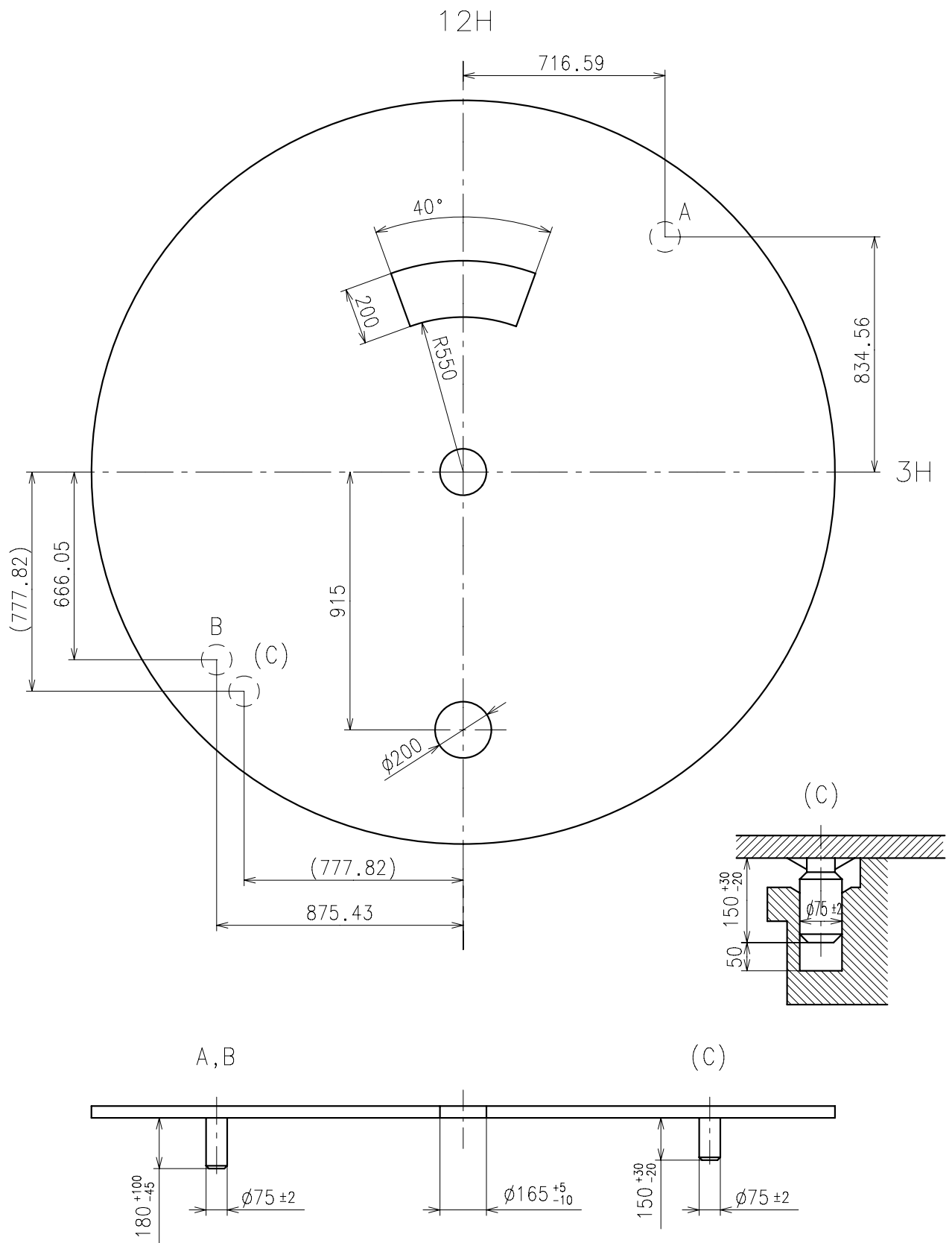




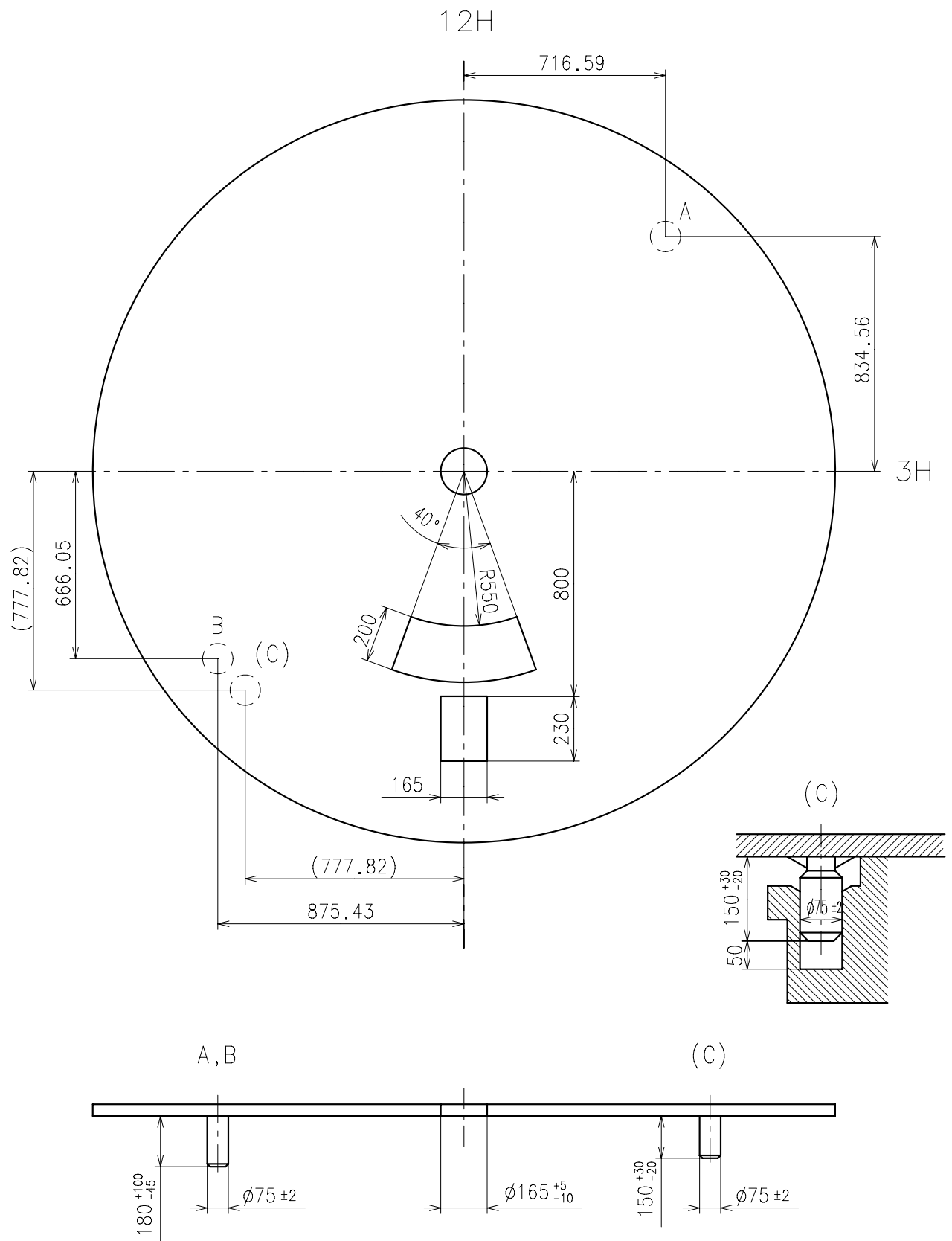
※ Use dial leg A-B or (A-C)



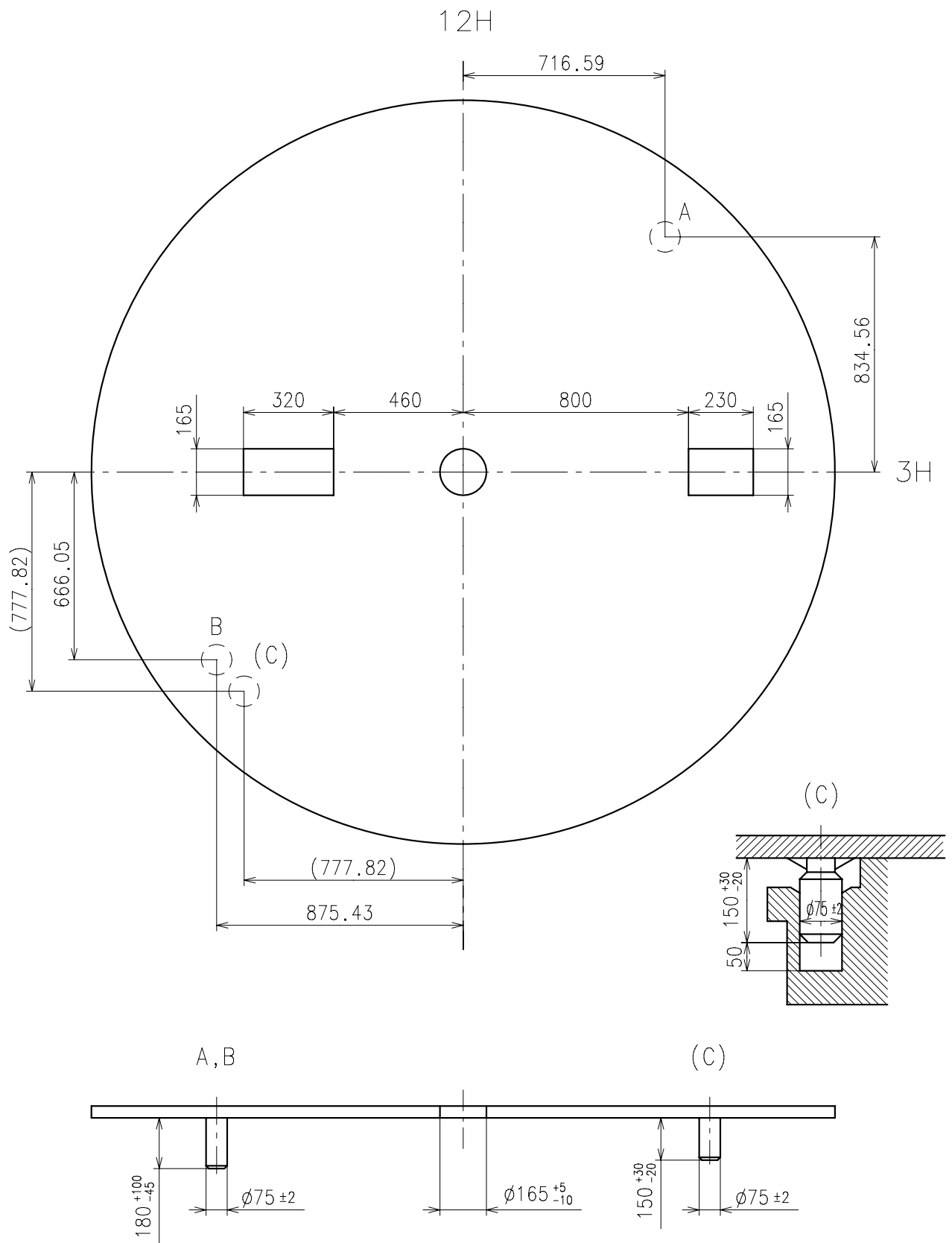
※ Use dial leg A-B or (A-C)



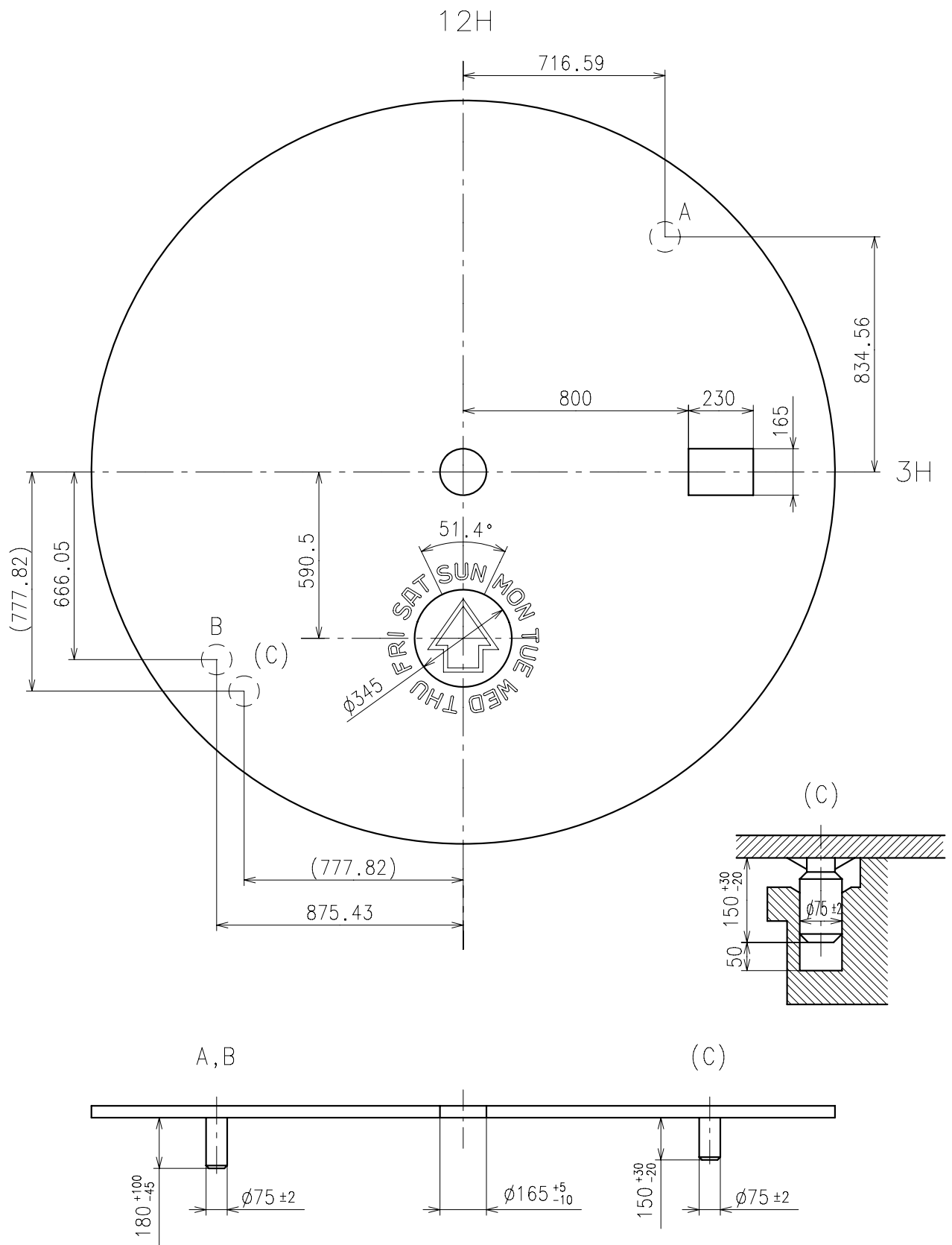
※ Use dial leg A-B or (A-C)



※ Use dial leg A-B or (A-C)



※ Use dial leg A-B or (A-C)

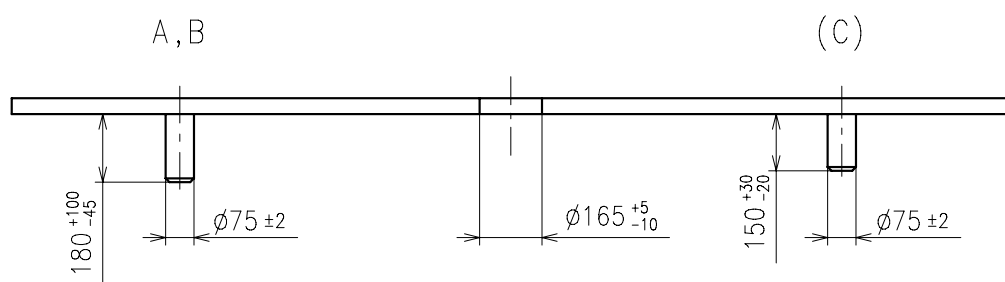
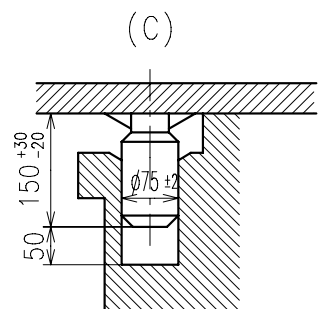
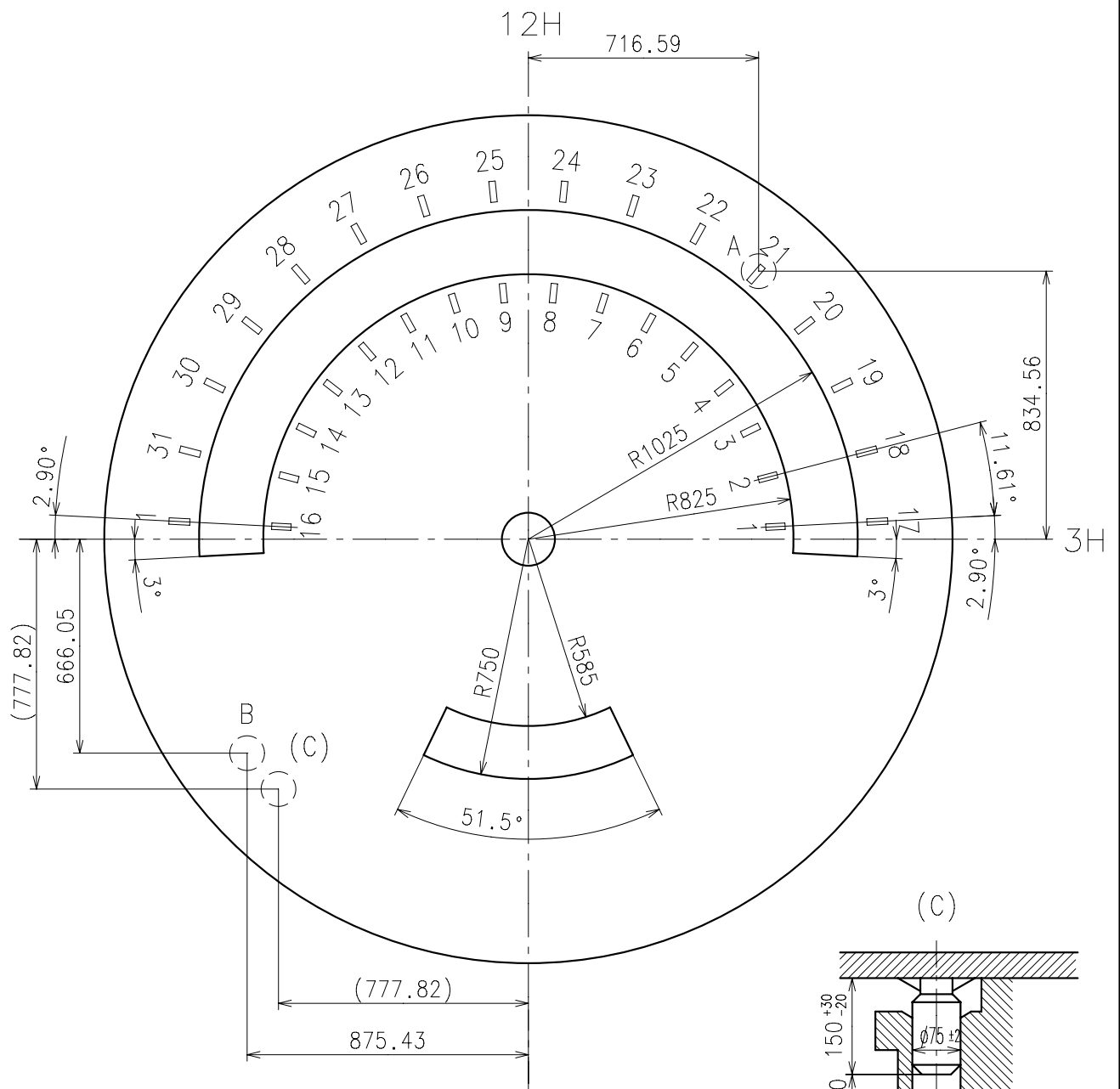


※ Use dial leg A-B or (A-C)

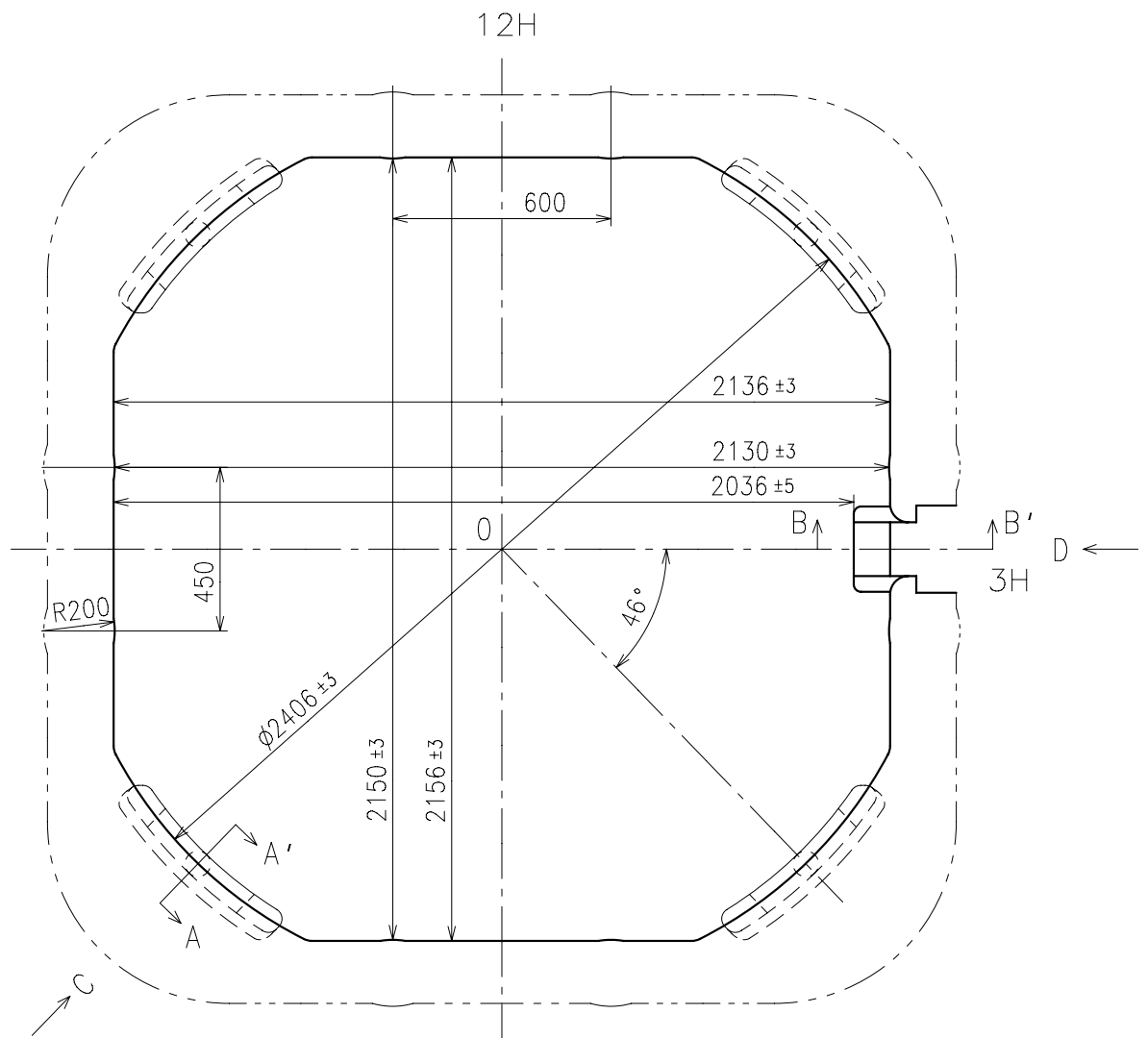




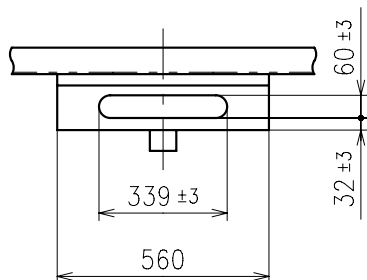




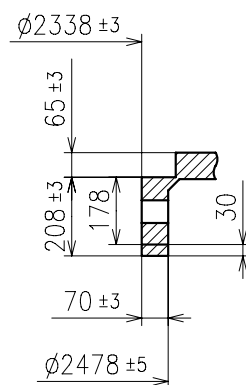
※ Use dial leg A-B or (A-C)



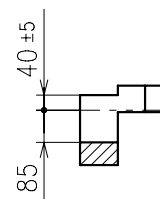
C view



A-A' section



B-B' section



D view

