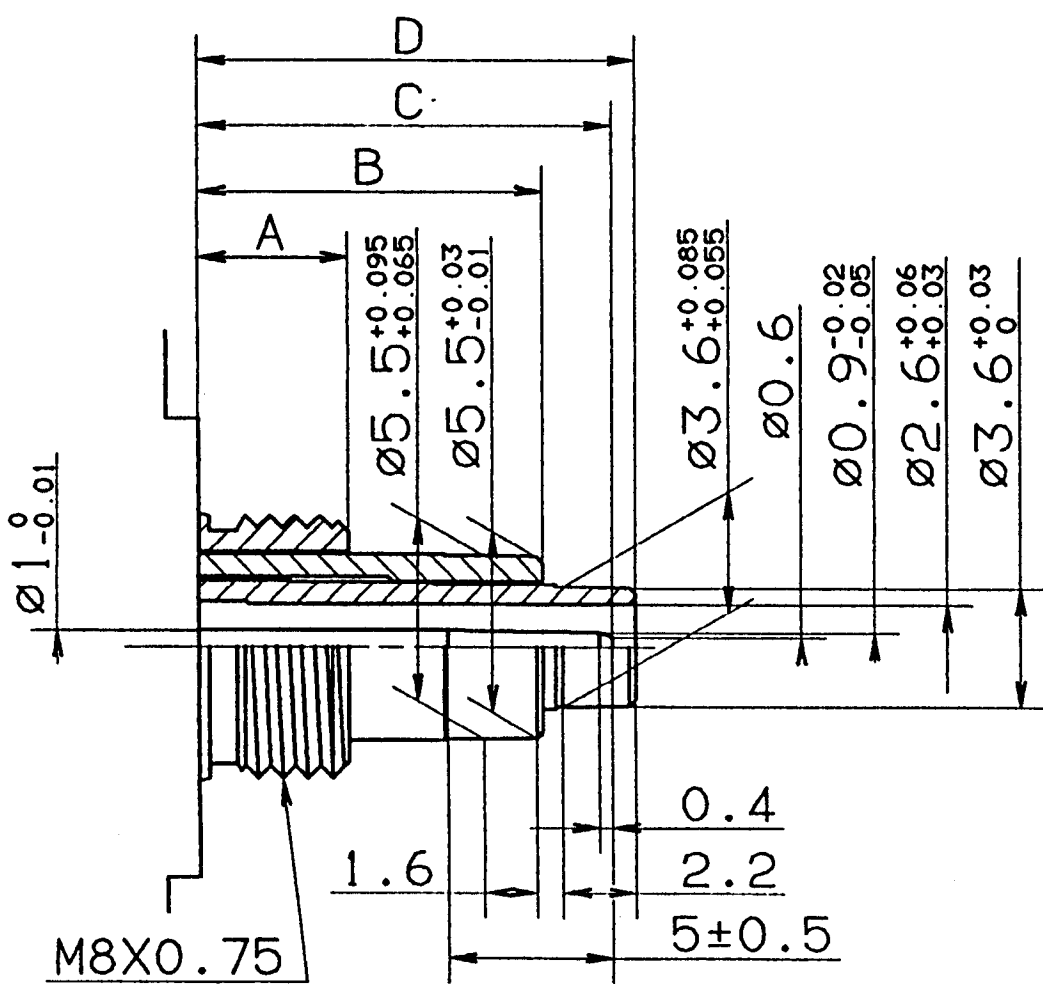
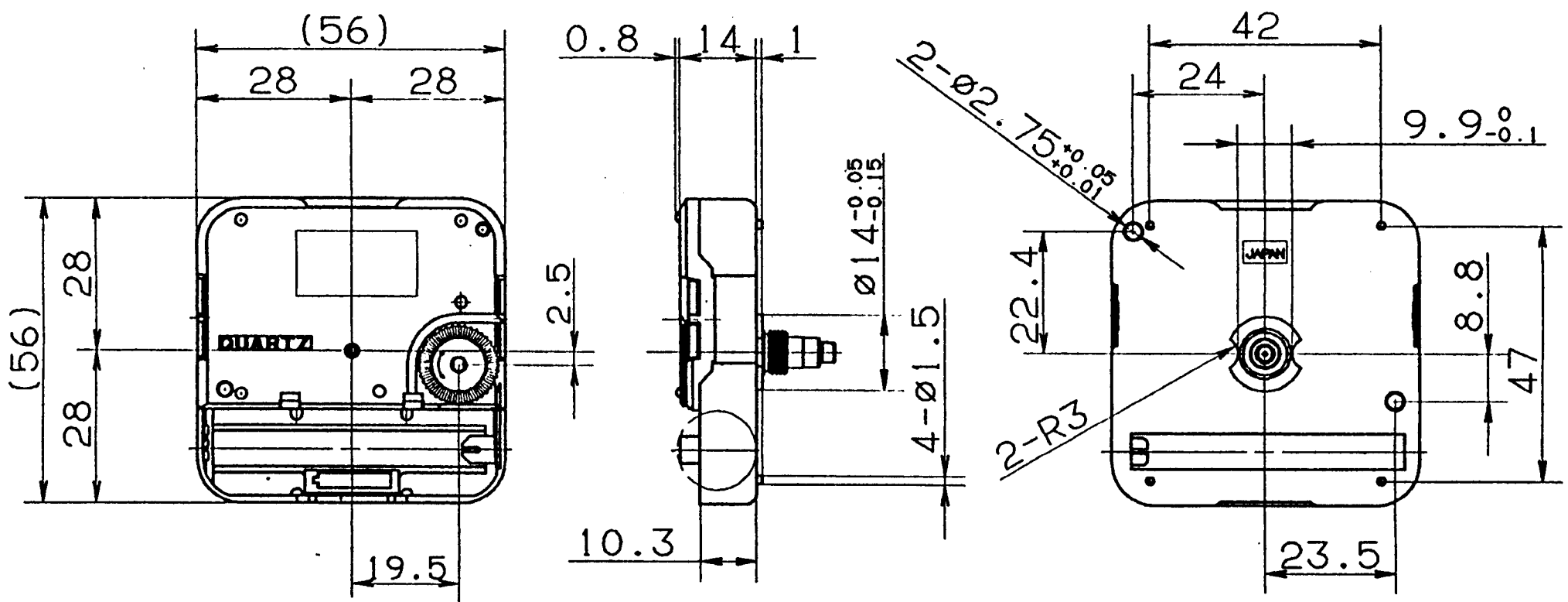
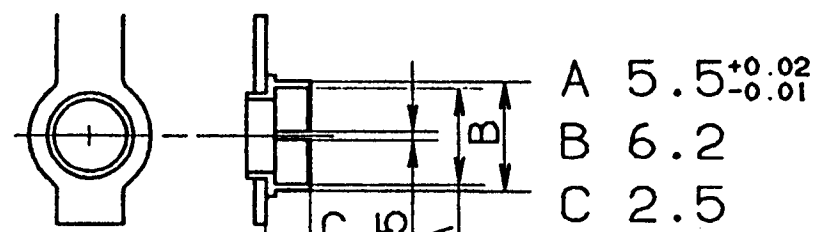


# QUARTZ CLOCK MOVEMENT

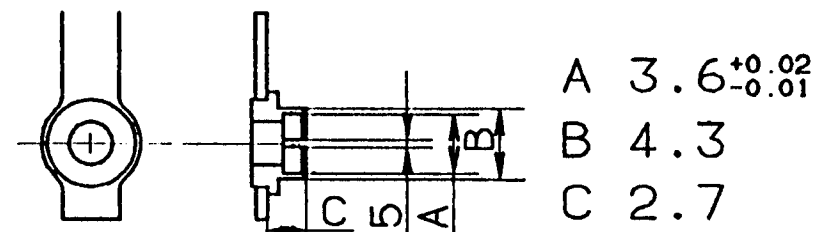
28009R  
28900R  
42800R



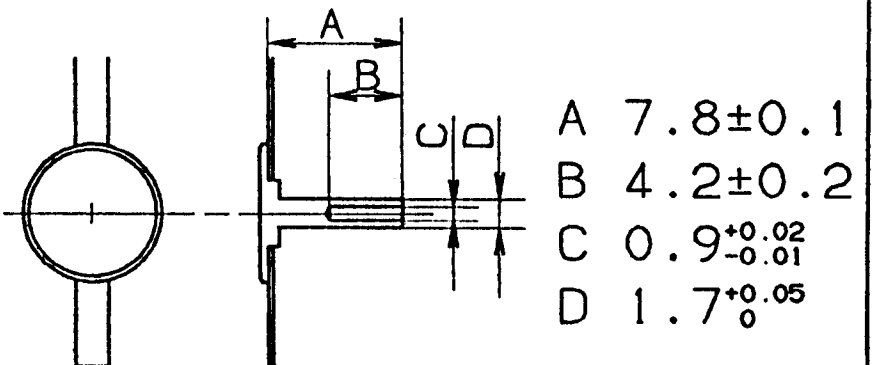
## HOUR HAND



## MINUTE HAND



## SECOND HAND



| CAL.   | A   | B    | C    | D    |
|--------|-----|------|------|------|
| 28009R | 4.5 | 8.6  | 11.0 | 11.4 |
| 28900R | 4.5 | 7.3  | 7.8  | 10.1 |
| 42800R | 4.5 | 10.4 | 12.5 | 13.2 |

## SPECIFICATIONS

|                          |   |                             |                             |
|--------------------------|---|-----------------------------|-----------------------------|
| Crystal Oscillator       | : 32.768KHz   | Rated Voltage               | : 1.5V                      |
| Time Keeping             | : $0.45 \pm 0.55$ sec/day<br>at 1.5V, 23°C                                  | Battery Size                | : AA size(IEC R6) 1 piece   |
| Operating Voltage        | : 1.3V to 1.7V  | Battery Life                | : 1 year                    |
| Operating Temperature    | : -10°C to 50°C   | Average Current Consumption | : under 120 $\mu$ A at 1.5V |
| Driving System           | : self-start, step-motor drive  | Allowed Hand                | Second Minute               |
| Circuit Output Frequency | : 0.5Hz   | Length                      | : under 130mm 160mm         |
| Weight                   | : approx. 22g w/o battery   | Weight                      | : under 2g 6g               |
| Torque                   | • second shaft : over 1.4gf-cm(1.5V)<br>• minute shaft : over 30gf-cm(1.5V) | Unbalance                   | : under 0.15g-cm 6g-cm      |