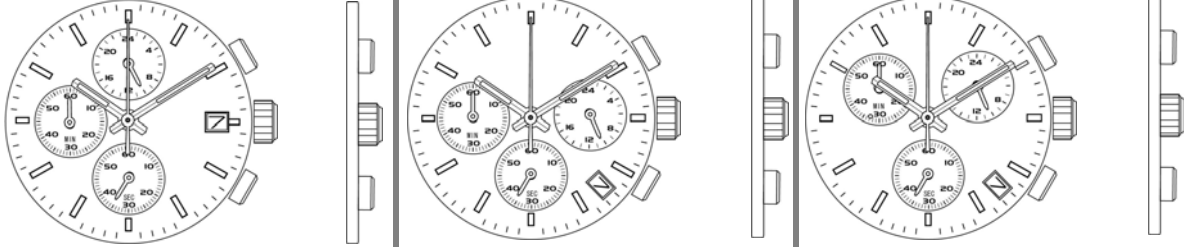


Cal. FS13/14 FS23/24

HIGH HAND CHRONOGRAPH SERIES

1. Basic Specification

CAL.	FS13	FS14	FS23	FS24	FS03	FS04
	HIGH HAND	HIGH HAND	HIGH HAND	HIGH HAND	HIGH HAND	HIGH HAND
Push Buttons	SLANTED	PARALLEL	SLANTED	PARALLEL	SLANTED	PARALLEL
Total height	5.10mm	5.25mm	5.10mm	5.25mm	4.13mm	4.28mm
Ligne	10 1/2"					
Overall diameter	Φ 23.7mm × 22.0mm (3H-9H)					
Case fitting diameter	Φ 23.3mm × 22.0mm (3H-9H)					
						
	eye position is same as FS10/11 eye position is same as FS20/21 eye position is same as FS00/01					
Date	○					
Battery & Life	SR626SW 2YEARS *					

*based on 1 hour/day chronograph use

<TIME STANDARD>

Type of quartz: Tuning fork type quartz crystal
Frequency : 32,768Hz
Accuracy : ±20 second / month worn under normal circumstances

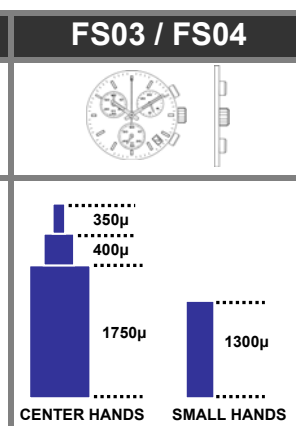
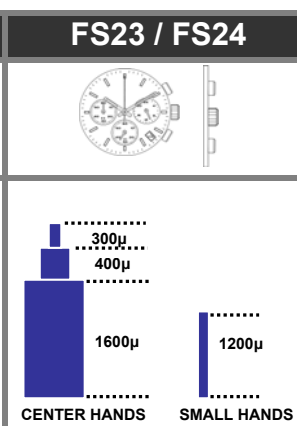
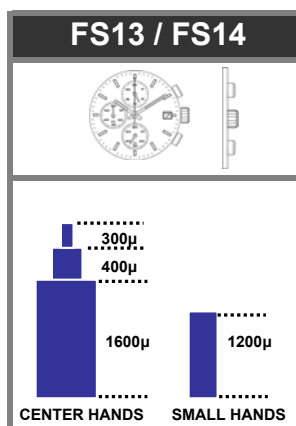
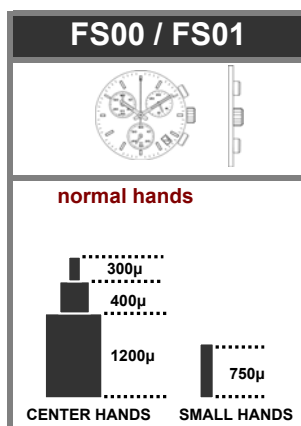
< Balanceable weight of hand >

Minute hand Max. 0.4 μN.m
Second hand Max. 0.035 μN.m
Other small hands Max. 0.02 μN.m

< Function >

Chronograph 1/1 sec. Basis (Up to 59 min. 59 sec.)

Powercell Saving Reset Mechanism(PSRM)
Over-loading Compensation Device(OLCD)
Digital Frequency Control(DFC) for time adjustment



2. Separated Parts

Setting stem	065- 549 × 1
Length from movement center to far end of setting stem	20.00mm
Thread	Φ 0.9mm × 9.06mm

3. Others

* Measurement of time rate

The unit(gate) time of measurement must be set at "10 sec." or integer fold value of 10 sec. owing to the DFC system, and the measurement must be performed in the form of complete watch.

* Marking on movement

JAPAN
MIYOTA CO.
(CAL. NO.)
NO JEWELS

* Typical clearance

Mov't - Caseback	minimum 200 microns
Top of hands - Glass	300 - 400 microns *

* subject to the glass, case structure, and the length of hand

* Note

Please use aluminum material hand for Chrono second hand

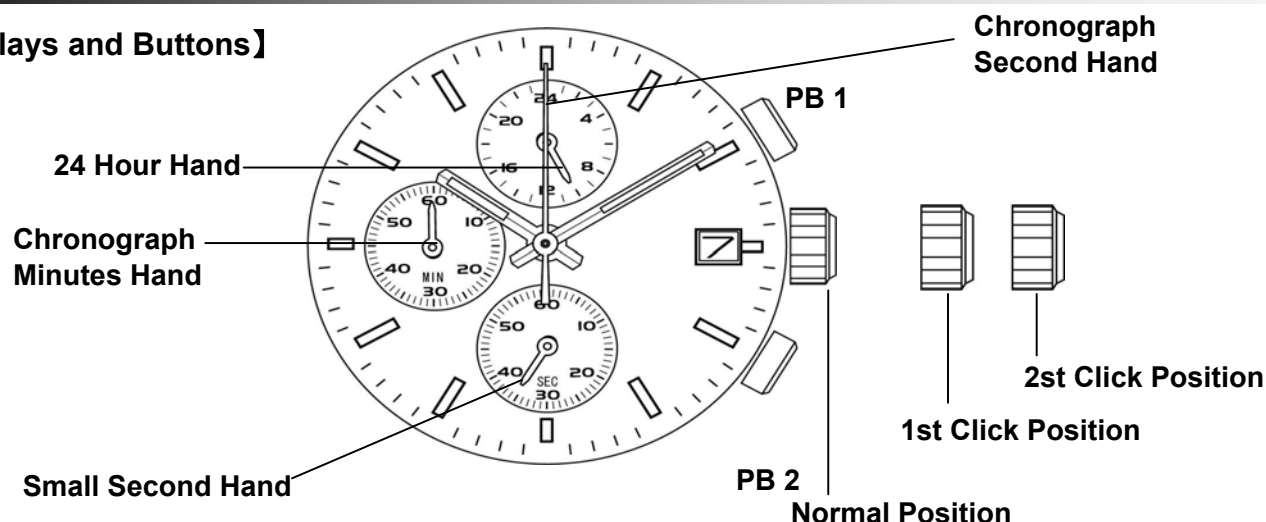
* TACHYMETER

The tachymeter is the device which measures the speed of an automobile. Knowing is how many seconds the car covers a distance of 1km, the meter can measure the approximate average speed per hour during a journey (up to the maximum measurable range of tachymeter is 60 seconds.)

If the chronograph is started at the same time as measurement, and stopped after 1 km, the average speed per hour can be determined according to the position of the second hand. If the car covers the distance of 1km in 45 seconds, the average hourly speed during the journey will be about 80 km.

4. Instruction Manual

【Displays and Buttons】



A) SETTING THE TIME

1. Pull the crown out to the 2nd Click Position.
2. Turn the crown to set the hour and minute hands.

B) SETTING THE DATE

* If the date is set between the hours of around 9:00 PM and 1:00 AM, the date may not change on the following day.

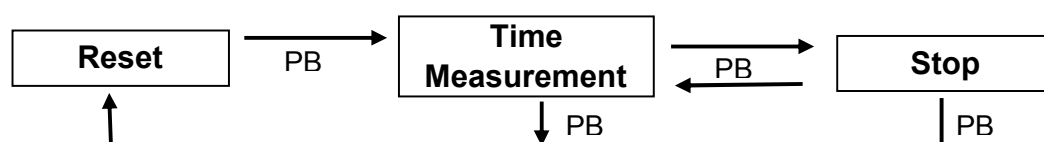
1. Pull the crown out to the 1st Click Position.
2. Turn the crown clockwise to set the date.
3. After the date has been set, push the crown back to the normal position.

C) USING THE CHRONOGRAPH

This chronograph is able to measure and display time in 1/1 second unit up to maximum of 1 hour.

【Measuring time with the chronograph】

1. The chronograph can be started and stopped each time button "PB1" is pressed.
2. To reset, press button "PB2" and the chronograph second & minute hands return to the zero positions.



E) CHRONOGRAPH RESET (INCL. AFTER REPLACING BATTERY)

This procedure should be performed when the chronograph second hand do not return to the zero second position after the chronograph has been reset, and including after the battery has been replaced.

1. Pull the crown to the 2nd Click Position.
2. Press the button "PB1" once to set the chronograph second hand ahead one scale, or keep pushing to set the chronograph second hands quickly.
3. Once the chronograph second hand has been zeroed, reset the time and return the crown to its normal position.

* Do not return crown to normal position while chronograph second hand return to 12:00 (ZERO) position. Hand stops on the way when crown are returned to normal position and these positions are recognized as 12:00 (ZERO) position.

These specifications might be changed without prior notice.

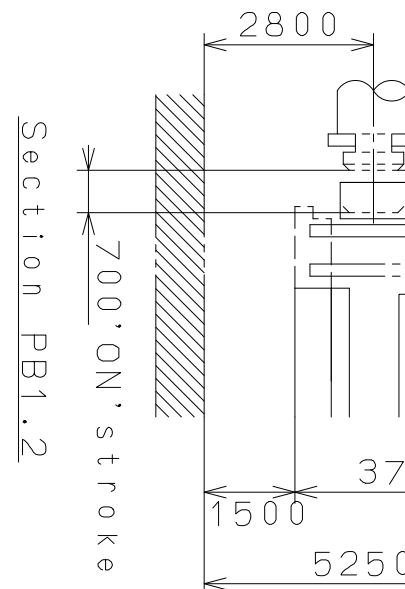
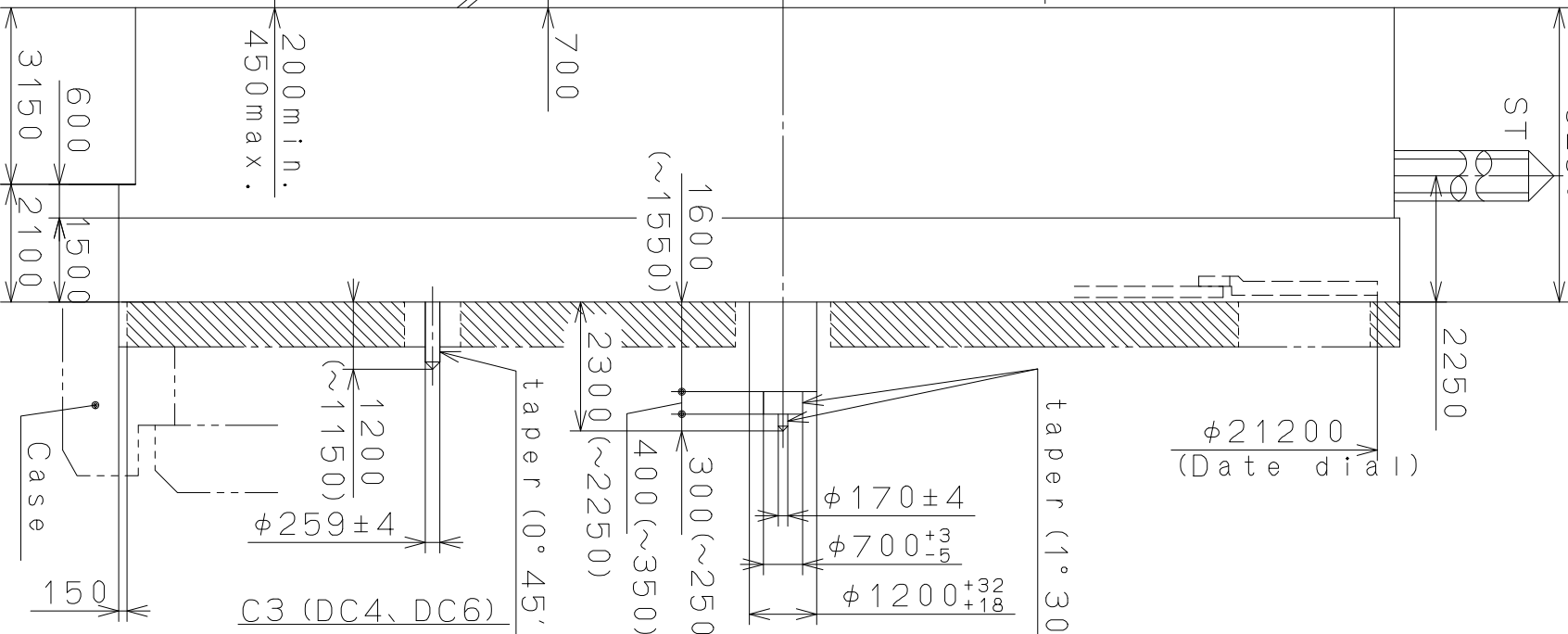
CITIZEN WATCH CO., LTD.

[illegible]

Technical drawing of a vertical shaft assembly, showing dimensions and labels:

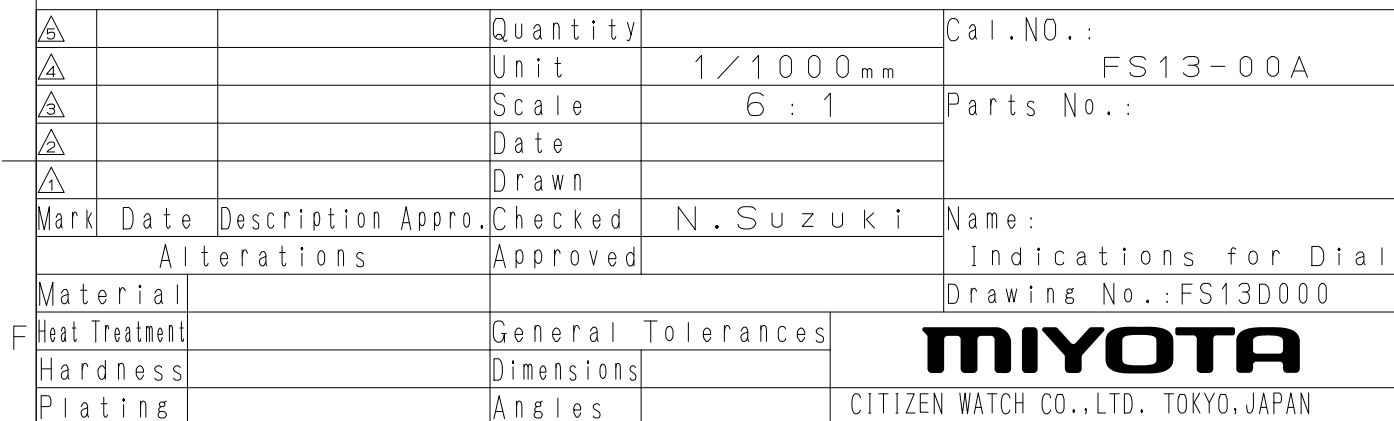
- Overall Dimensions:**
 - Total height: 5100
 - Top section height: 3000
 - Bottom section height: 2100
 - Shaft diameter at top: $\phi 21200$ (Date dial)
- Internal Components and Dimensions:**
 - ST (Shaft Top):** Indicated by a symbol at the top of the shaft.
 - Case:** The outer housing, with a height of 2100.
 - Internal Shafts and Bearings:**
 - Shaft diameter: $\phi 170 \pm 4$
 - Bearing inner diameter: $\phi 700^{+3}_{-5}$
 - Bearing outer diameter: $\phi 1200^{+32}_{+18}$
 - Internal Dimensions (from top to bottom):**
 - 1600 (Total length of the main shaft section)
 - (~1550) (Length of the main shaft section)
 - 300 (~250) (Length of the bearing section)
 - 400 (~350) (Length of the bearing section)
 - 2300 (~2250) (Length of the bearing section)
 - 1200 (~1150) (Length of the bearing section)
 - 150 (Length of the bearing section)
 - Other Labels:**
 - taper ($0^\circ 45'$)
 - taper ($1^\circ 30'$)
 - C3 (DC4, DC6)

△		Quantity	Cal. NO. :
△		Unit	FS13
△		Scale	1 / 1000 mm
△		Date	8 : 1
△		Drawn	Parts No. :
△		Checked	
△		Approved	
△		N. Suzuki	
△		Name:	
△		F r a m e f o r C a s e	
△		Drawing No. : FS13C000	
△		General Tolerances	
△		Dimensions	
△		Angles	
△		CITIZEN WATCH CO., LTD. TOKYO, JAPAN	

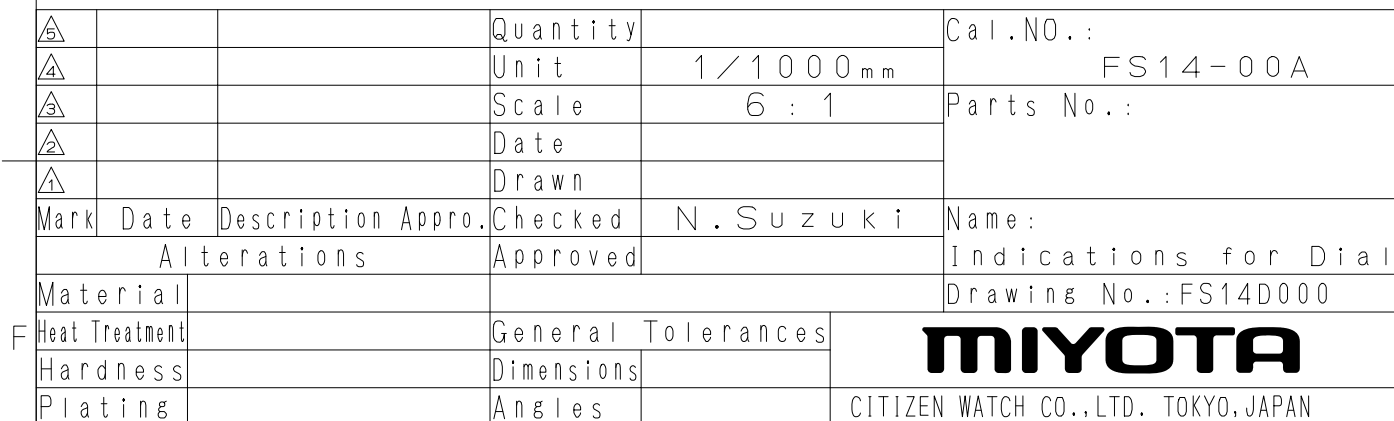
[illegible]

△		Quantity	Cal. NO. :
△		Unit	FS14
△		Scale	1/1000 mm
△		Date	8 : 1
△		Drawn	Parts No. :
Mark	Date	Description	Approved
	Alterations	Checked	N. Suzuki
Material			Frame for Case
Heat Treatment		General Tolerances	Drawing No. : FS14C000
Hardness		Dimensions	
Plating		Angles	
<div> <div>CITIZEN WATCH CO., LTD. TOKYO, JAPAN</div> <div>miyOTA</div> </div>			

This drawing is provisional and subject to our confirmation and/or revision without notice.



This drawing is provisional and subject to our confirmation and/or revision without notice.



This drawing is provisional and subject to our reconfirmation and/or revision without notice.

*** T I P W (01) *** 065-549 (2100 1121) 01-12-07

<div><div>7</div><div>6</div><div>5</div><div>4</div><div>3</div><div>2</div><div>1</div></div>			Quantity		Cal. No. :
			Unit	1/1000 mm	
			Scale	20 : 1	Parts :
			Date		065-549
			Drawn		
			Checked	T. Hiruta	
			Approved		Name : SETTING STEM
Material					Drawing No. : 5490S000
Heat Treatment			General Tolerances		<div>CITIZEN</div> <div>WATCH CO., LTD.</div> <div>TOKYO, JAPAN</div>
Hardness			Dimensions		
Plating			Angles		

