

# **THE CALIBER 89**

#### The most complicated watch in the world

The Calibre 89 is the most complicated watch in the world; independently of our mean time (hours, minutes and seconds), it gives or incorporates the followings functions: hours, minutes and seconds of sidereal time, time in a second time zone, time of sunset and sunrise, equation of time, *tourbillon* regulator, perpetual calendar, century leap year correction, date of the month, century, decade, year, day of the week, months, four-year cycle, sun hand (season, equinox, solstice, zodiac), stars chart, age and phases of the moon, date of Easter, chronograph, split-seconds, 30 minute recorder, 12 hour recorder, Grande Sonnerie with carillon, *Petite Sonnerie* with carillon, minute-repeater, alarm, going train up-and-down indication, striking train stop work, twin barrel differential winding, four-way setting system and winding-crown position indication.

The Calibre 89 was produced to commemorate the 150<sup>th</sup> Anniversary of PATEK PHILIPPE & C° in 1989. Four watches were produced; the prototype is now exhibited in the PATEK PHILIPPE MUSEUM in Geneva.

Total development time	9 years
Research and development	5 years
Manufacture	4 years
Total diameter	89 mm.
Total thickness	41 mm
Total weight	1100 grams
Case	18 ct. Gold
Number of components	1728, including:
• 184 wheels	
61 bridges	
332 screws	
• 415 pins	

- 68 springs
- 429 mechanical parts
- 126 jewels
- 2 main dials
- 24 hands
- 8 display dials



# THE CALIBER 89

# Functions

- Hours, minutes and seconds of sidereal time
- Time in a second time zone
- Time of sunset and sunrise
- Equation of time
- Tourbillon regulator
- Perpetual calendar
- Century leap year correction
- Date of the month
- Century, decade and year
- Day of the week
- Months
- Four-year cycle
- Sun hand (season, equinox, solstice, zodiac)
- Stars chart
- Age and phases of the moon
- Date of Easter
- Chronograph
- Split-seconds
- 30 minute recorder
- 12 hour recorder
- Grande Sonnerie with carillon
- Petite Sonnerie with carillon
- Minute-repeater
- Alarm
- Going train up-and-down indication
- Striking train up-and-down indication
- Striking train stop work
- Twin barrel differential winding
- Four-way setting system
- Winding-crown position indication



## Movement

Front of the main plate:

- Minute-repeater
- o Alarm
- 12-hours counter 0
- Power-reserve indication 0

#### Movement

- Back of the main plate:
  - Split-second chronograph
  - 30-minutes counter 0
  - o Tourbillon escapement
  - Regulation of the chime speed
  - o The four gongs of the chime
  - The gong of the alarm

#### Sidereal plate

All the functions of the sidereal calendar

Date of Easter

# Prototype of its functioning

Mechanism of the date of Easter until 2017 Patek Philippe Patent with indicator of cam-replacement in 2018 PATEK PHILIPPE **GENEVE** 

## Calendar plate

All the functions of the secular perpetual calendar Patek Philippe Patent:

- Day (with aperture)
  Date (with retrograde hand)
  Month (with aperture)
- Millesimal number (with aperture)
- Leap year cycle (with aperture)
- Phases and age of the moon

## Prototype of its functioning

Mecanism of the secular retrograde perpetual calendar

## Transversal view

Central watch staff:

- Trains of wheels
- o Hands
- o Celestial map (2800 stars), Geneva latitude