



**TIMEWORX**

# make your own clock

Quartz movements

and accessories

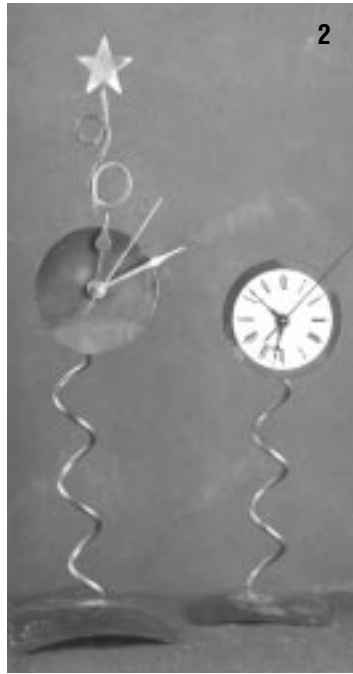
from Timeworx

# Get Creative

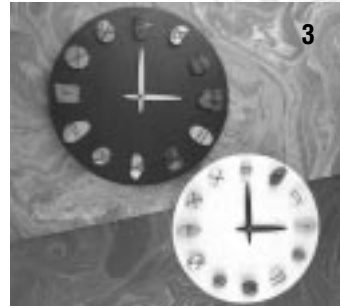
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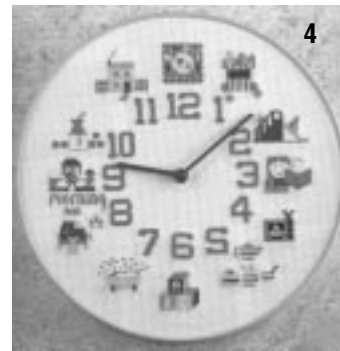
1



2



3



4



5



6



7



8



9



10



11



12

1, 8, 9 - from *Classic Clocks for Woodworkers* - Raymond Haigh  
 2, 3, 4, 5, 7, 12 - from *Clock Works* - Juliet Bawden  
 6, 10, 11 - from *Novelty Clocks* - Raymond Haigh

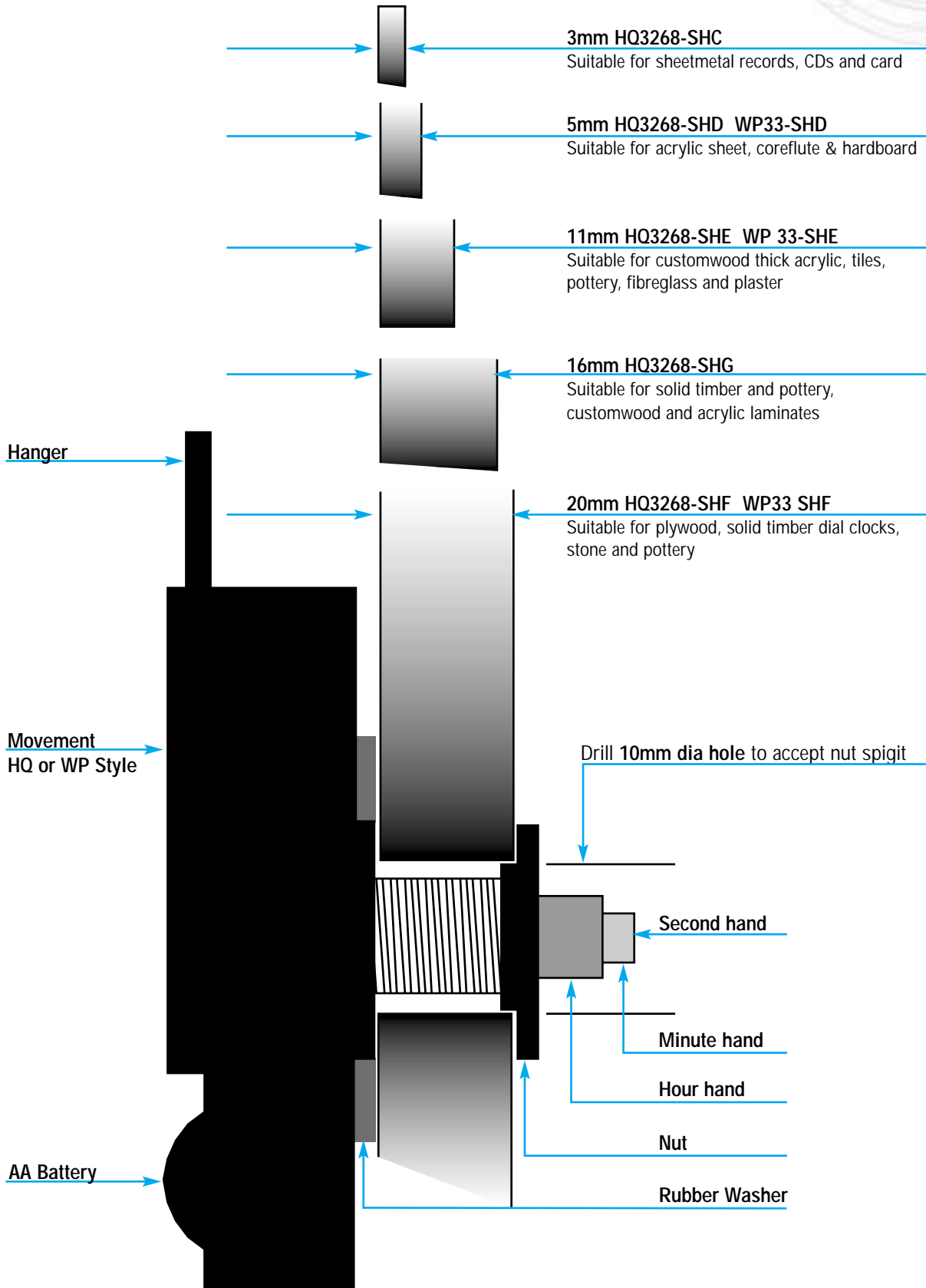
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# Quartz Movement

**TIMEWORX**

Used on Models HQ3268, WP33 -

Type SHC, SHD, SHE, SHF and SHG



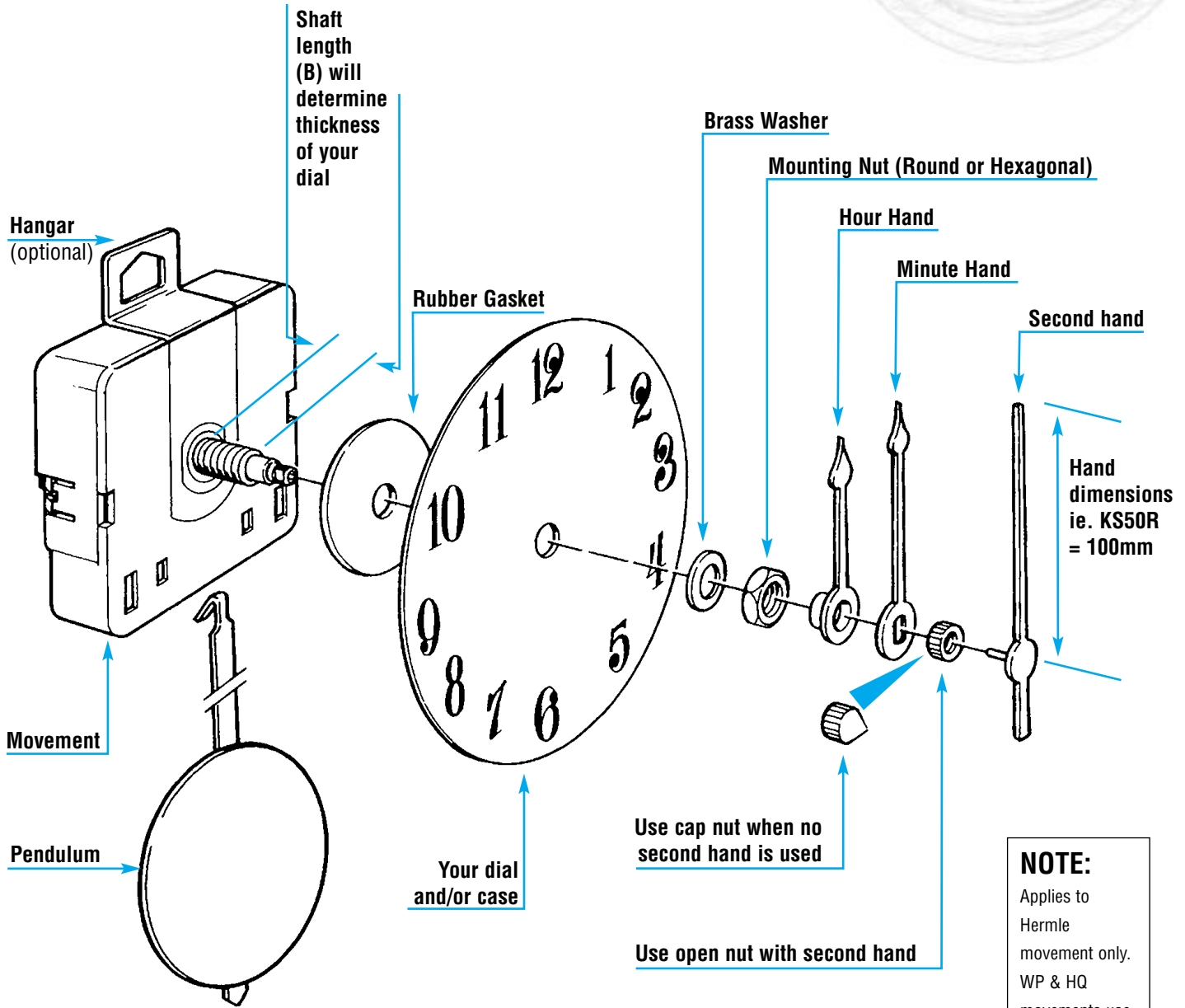
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# Mounting

General mounting instructions for battery Quartz regular and pendulum movements

TIMEWORX



**NOTE:**  
Applies to Hermle movement only. WP & HQ movements use press on hands so **DO NOT** use cap or nut.

Typical assemble - Actual hardware may differ

**HINTS:**

- Select hands and movement to be used **BEFORE** making your clock.
- If using pottery dial make hole for movement larger than normally required as clay will shrink during firing.
- Do not over tighten mounting nut as this may damage the movement.
- Set hands at 12.00 O'Clock when installing for the first time. This will ensure correct alignment.
- Rotate hands around dial after assembly. Ensure hands clear the face, any applied numerals, and other hands at all times.

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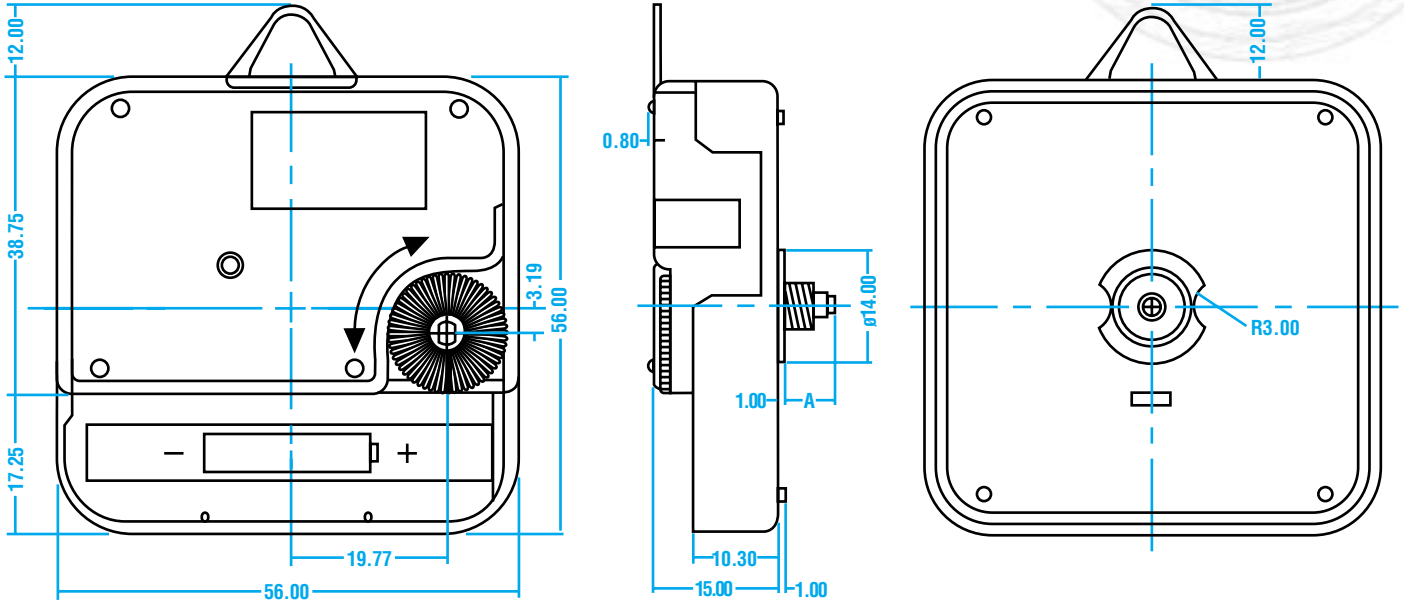
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# Quartz Clock Movement



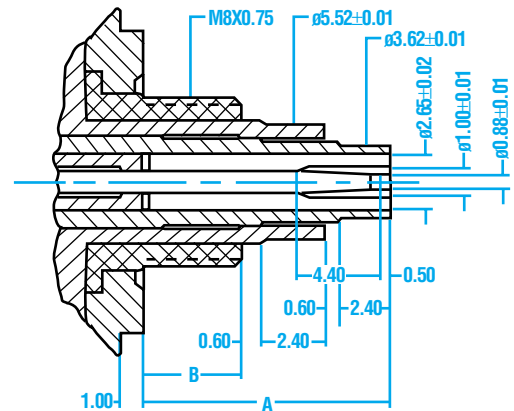
HQ 3268 SHC, SHD, SHE, SHF, SHG

**TIMEWORX**

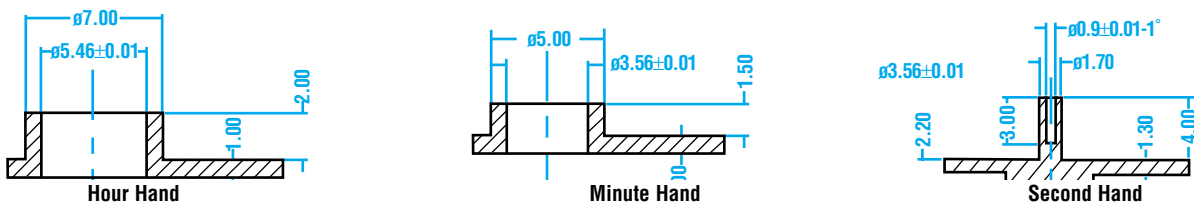


	HQ 3268 SHC	HQ 3268 SHD	HQ 3268 SHE	HQ 3268 SHF	HQ 3268 SHG*
A	11.5	13.0	19.0	28.2	24.0
B	4.6	6.1	12.1	21.0	16.0

\* The SHG shaft length B=16mm!



## PLASTIC HAND



## SPECIFICATIONS

Crystal Oscillator 32.768KHZ  
 Accuracy at 22°  $\pm 20$ sec/month  
 0.45 $\pm$ 0.55 sec/day  
 Operating Voltage 1.3V to 1.7V  
 Average Current  
 Consumption Time Less than  $\leq 150$ uA at 1.5V

Resonance Frequency 2048  
 Motor Type Two-pole stepping motor  
 Battery Size AA size (IEC R6) 1pc  
 Battery Life Approx 1 year  
 Operating Temperature -10° to +50°

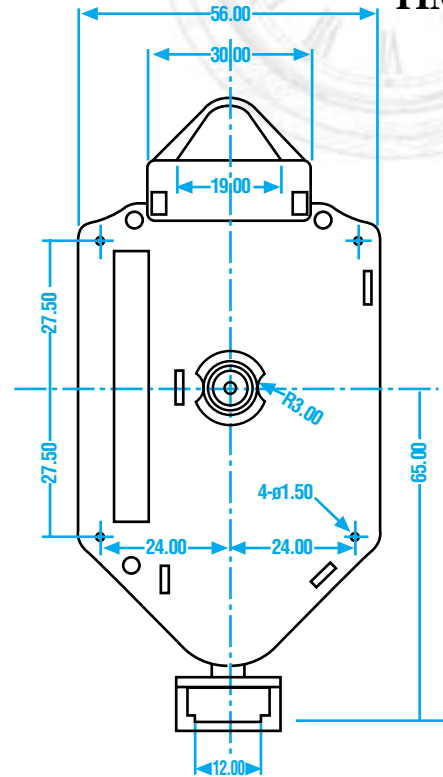
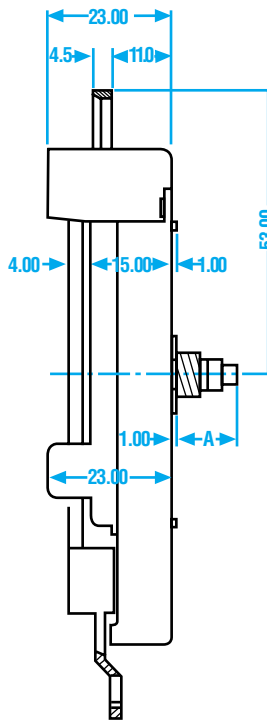
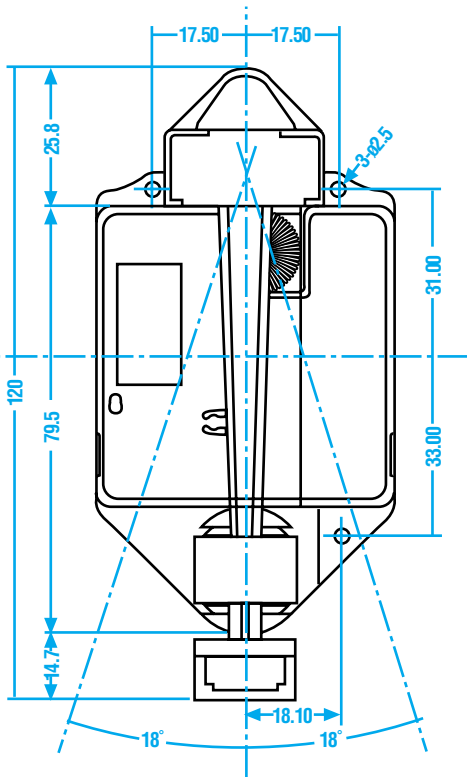
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# Quartz Pendulum Clock Movement

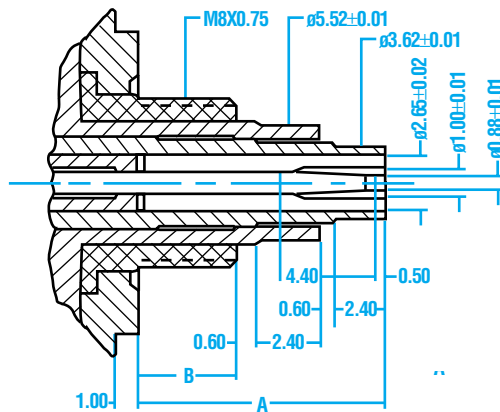


WP33 SHD, SHE, SHF

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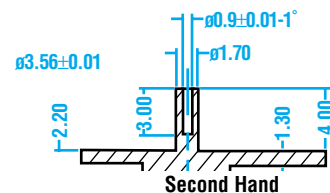
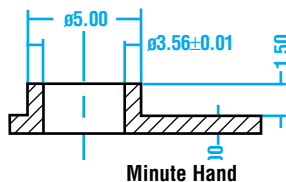
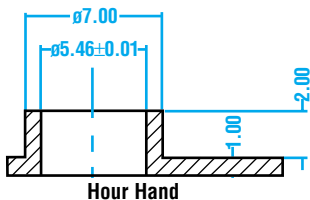
	HQ 3268 SHD	HQ 3268 SHE	HQ 3268 SHF
A	13.0	19.0	28.2
B	6.1	12.1	21.0



## PENDULUMS

See page 21 for pendulums to suit this movement.

## PLASTIC HAND



## SPECIFICATIONS

Crystal Oscillator 32.768KHZ  
Accuracy at 22° ±20sec/month  
0.45±0.55 sec/day  
Operating Voltage 1.3V to 1.7V

Average Current Consumption Time w/Pendulum  
Motor Type Two-pole stepping motor  
Battery Size AA size (IEC R6) 1pc  
Battery Life Approx 1/2 year  
Operating Temperature -10° to +50°

Less than ≤150uA at 1.5V  
Less than ≤350uA at 1.5V (Pendulum length 200mm weight 60g)  
Two-pole stepping motor  
AA size (IEC R6) 1pc  
Approx 1/2 year  
-10° to +50°

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# General purpose hands

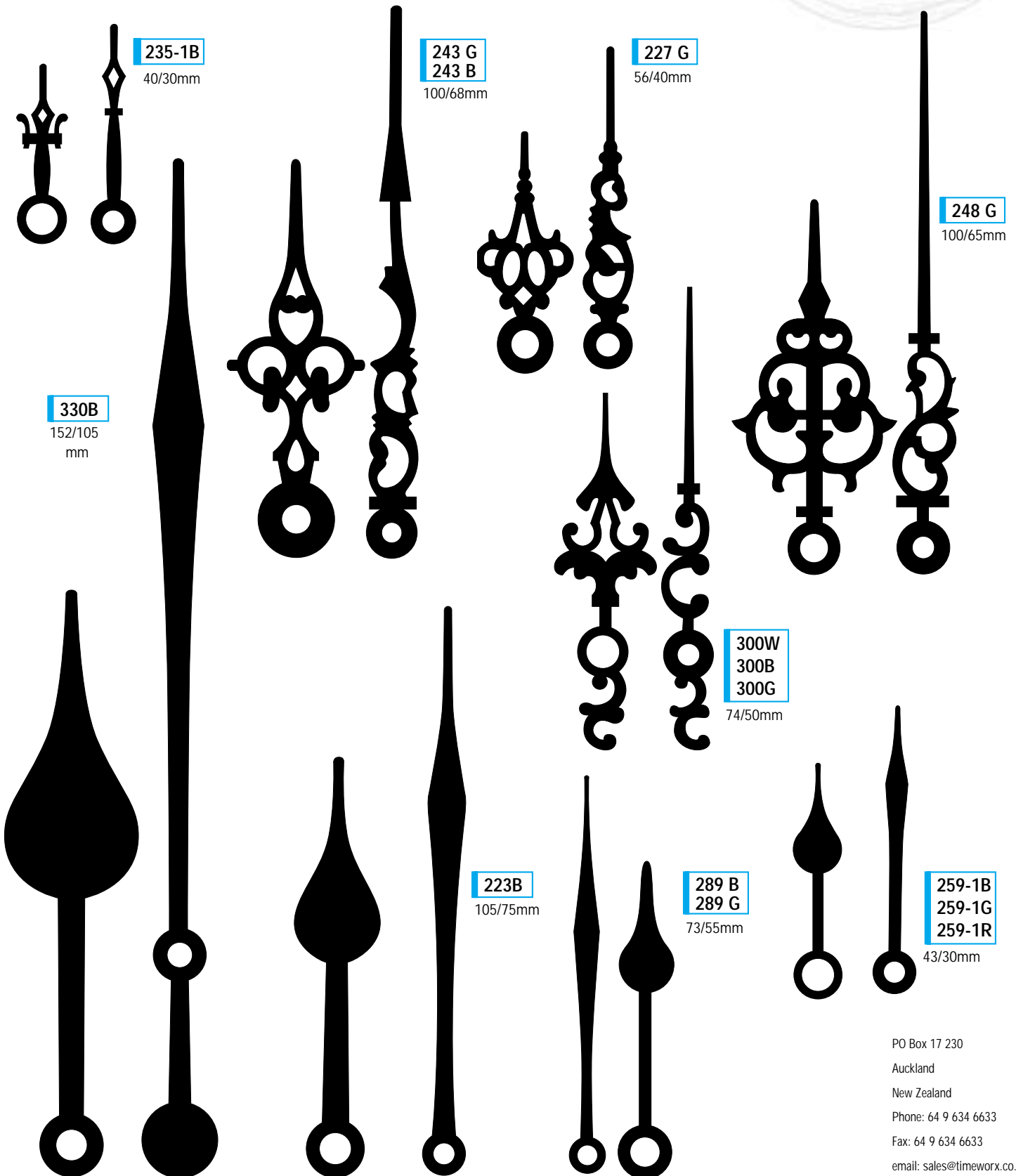


ANODISED ALUMINIUM WITH BRASS BUSHING

NOTE: Hands (except second hands) come with protective plastic layer. Peel plastic off before use)

**TIMEWORX**

B=Black BL=Blue R=Red G=Gold W=White



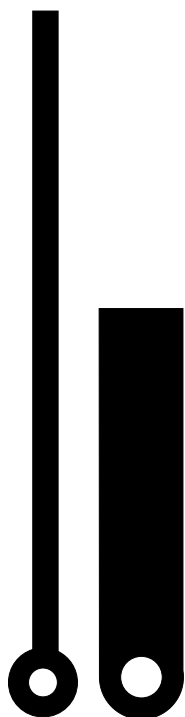
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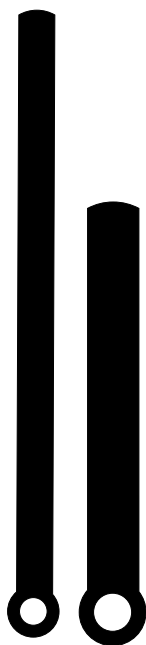
# General purpose hands

**B=Black BL=Blue R=Red G=Gold W=White**

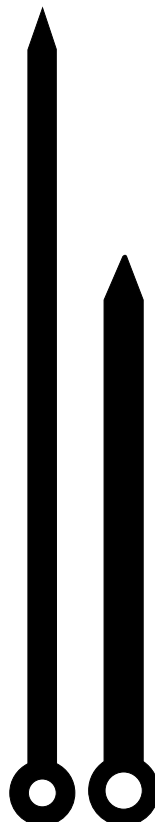
**TIMEWORX**



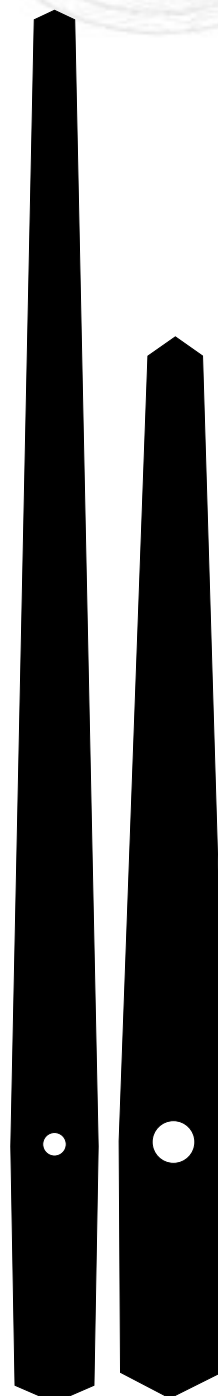
**247 B**  
81/50mm



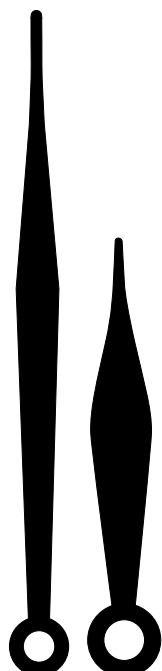
**215 B**  
**215 W**  
81/55mm



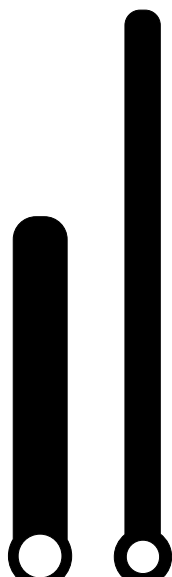
**214B**  
**214S**  
**214G**  
105/72mm



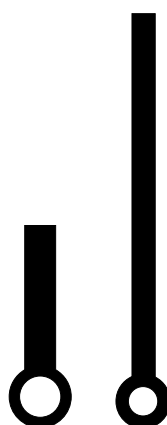
**21 B**  
154/110mm



**222-1 B**  
86/54mm



**282W**  
75/43mm



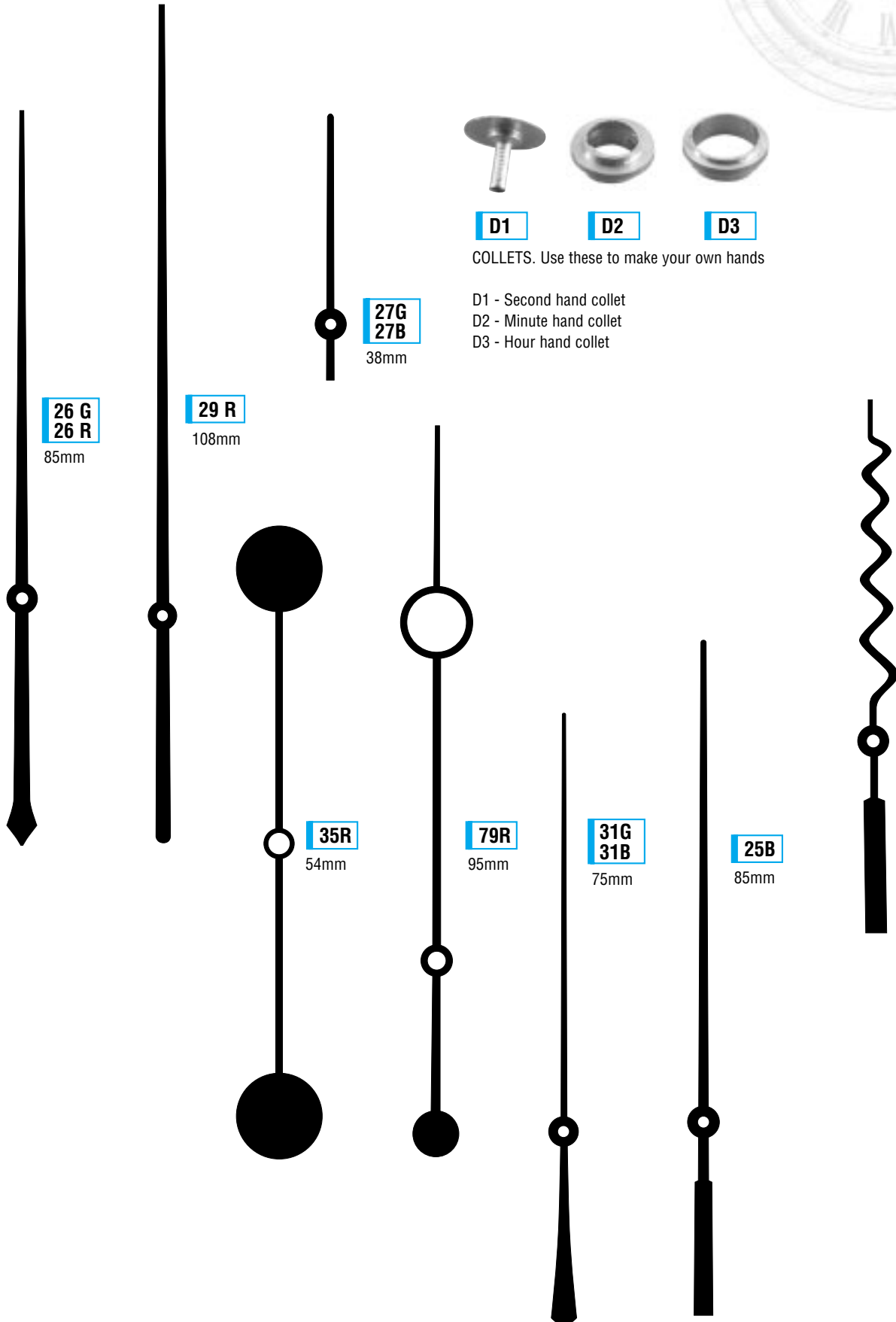
**297W**  
**297B**  
50/22mm

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# General purpose hands

**B=Black BL=Blue R=Red G=Gold W=White**

**TIMEWORX**



**D1**

**D2**

**D3**

COLLETS. Use these to make your own hands

D1 - Second hand collet  
D2 - Minute hand collet  
D3 - Hour hand collet

**26 G**  
**26 R**  
85mm

**29 R**  
108mm

**27 G**  
**27 B**  
38mm

**35 R**  
54mm

**79 R**  
95mm

**31 G**  
**31 B**  
75mm

**25 B**  
85mm

**76 R**  
**76 S**  
75mm

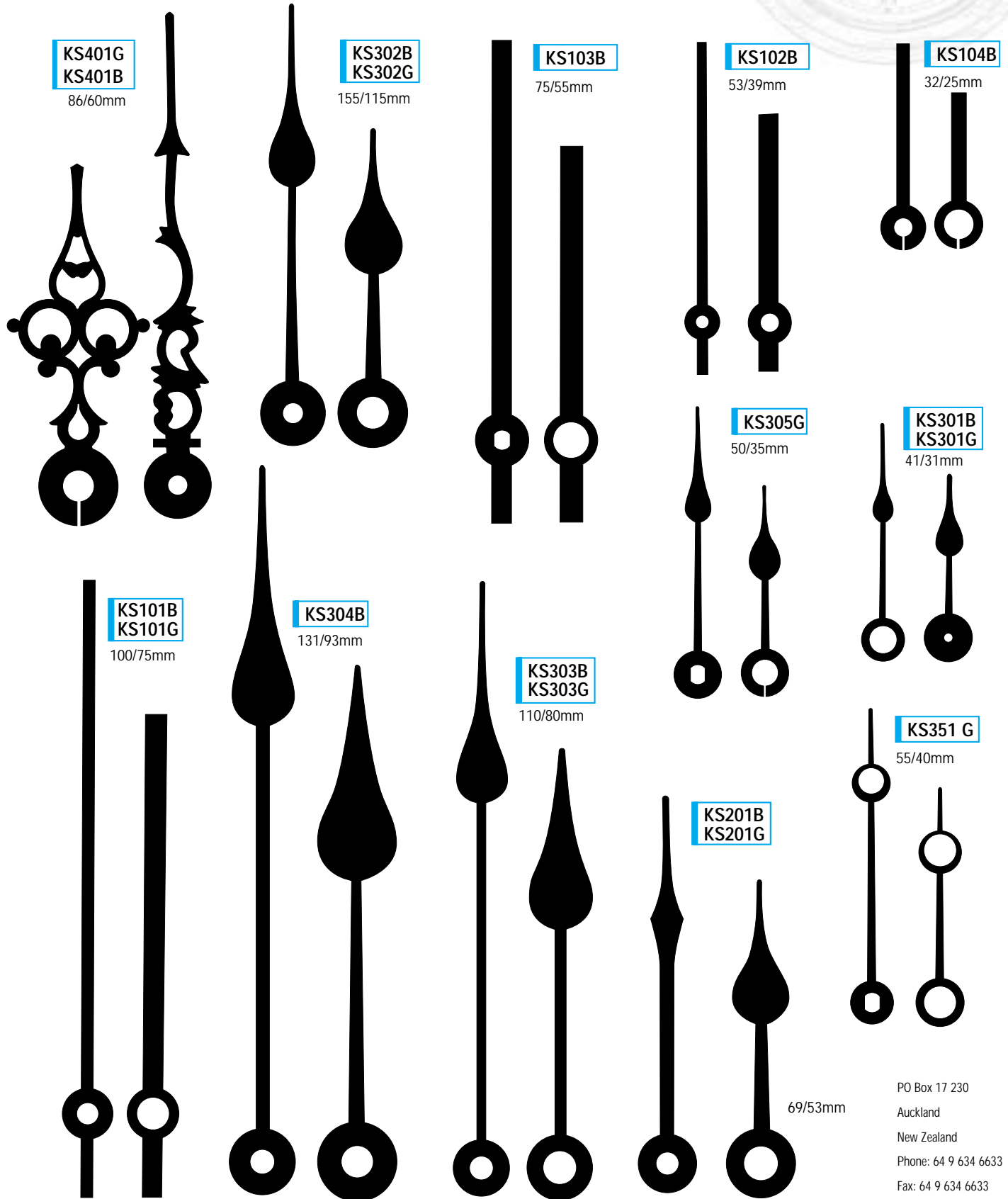
# KS hands

HIGH QUALITY LACQUERED ALUMINIUM HANDS  
WITH PRESSED BUSHINGS

B=Black BL=Blue R=Red G=Gold W=White



**TIMEWORX**

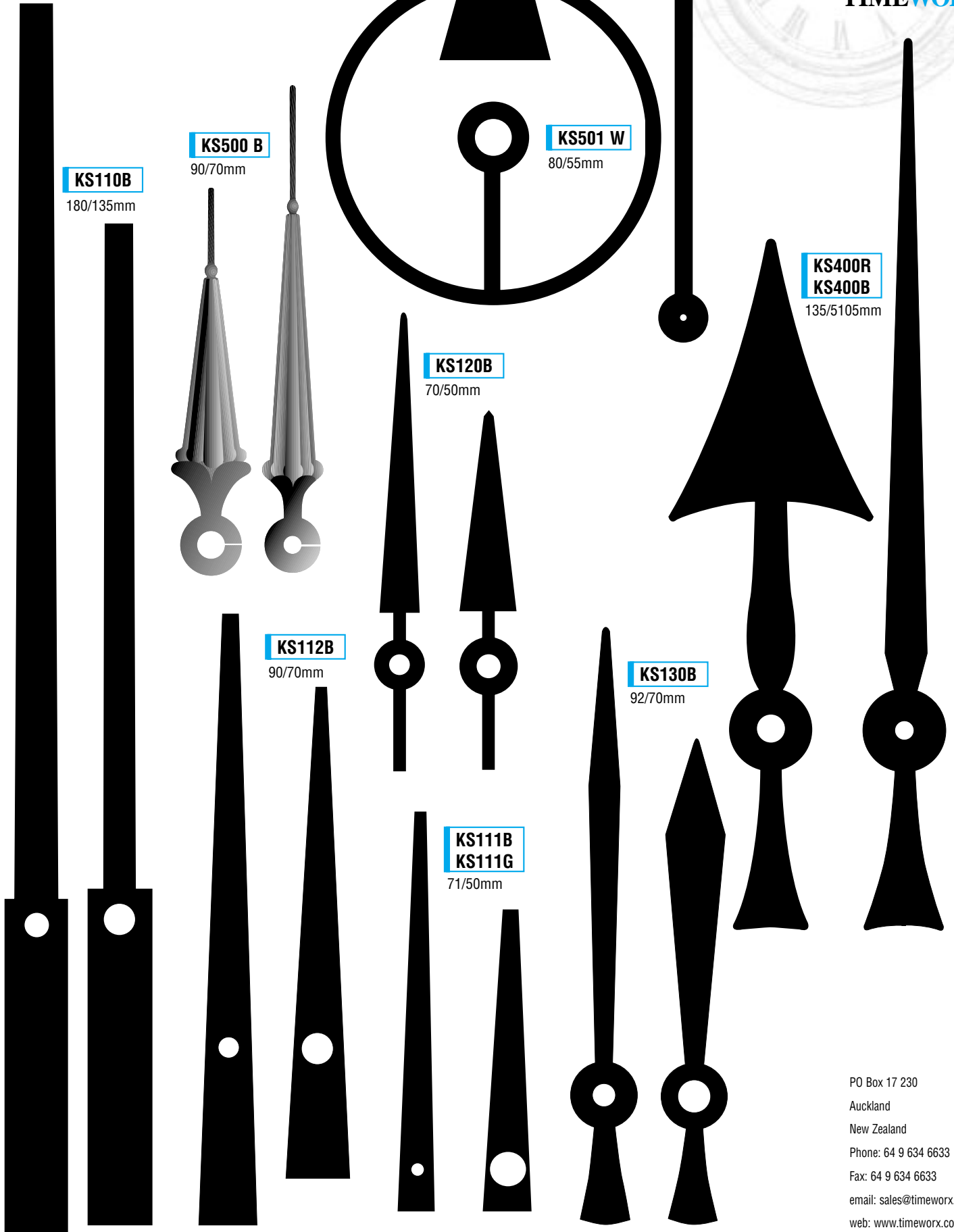


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# KS hands

B=Black BL=Blue R=Red G=Gold W=White

**TIMEWORX**



**KS110B**  
180/135mm

**KS500 B**  
90/70mm

**KS501 W**  
80/55mm

**KS400R**  
**KS400B**  
135/5105mm

**KS120B**  
70/50mm

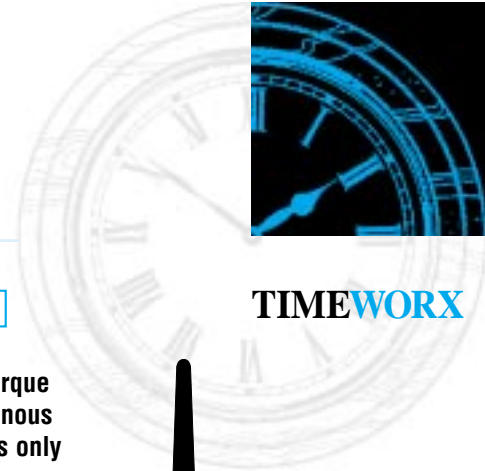
**KS112B**  
90/70mm

**KS130B**  
92/70mm

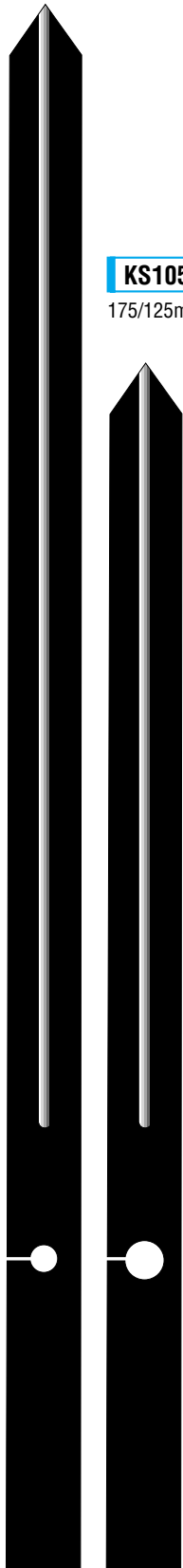
**KS111B**  
**KS111G**  
71/50mm

# KS hands

**B=Black BL=Blue R=Red G=Gold W=White**



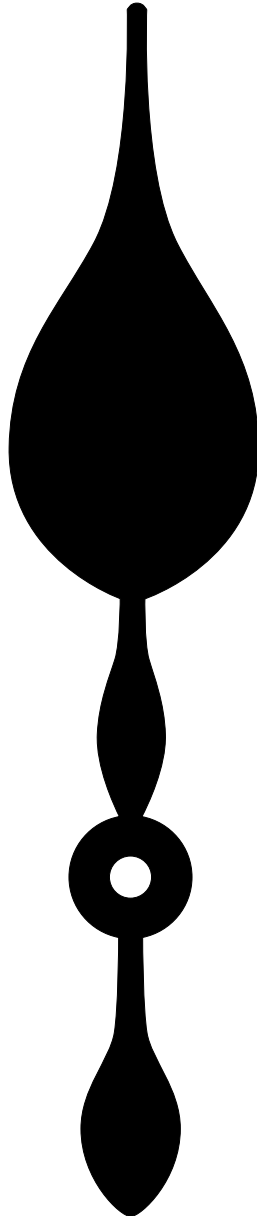
**TIMEWORX**



**KS105B**  
175/125mm



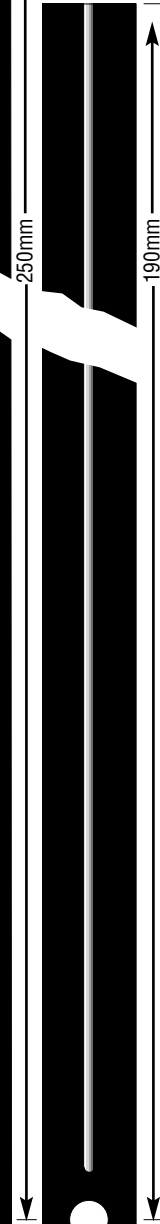
**KS320B**  
155/115mm



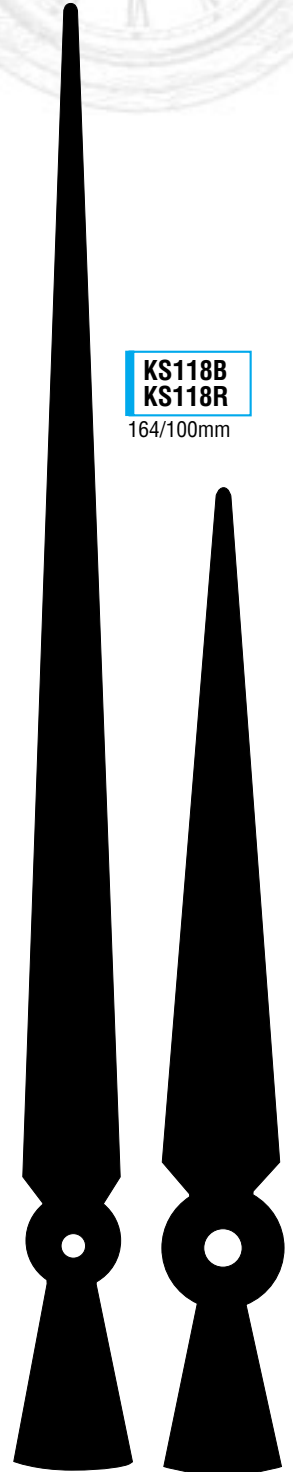
**KS106 B**

250/190mm

For high torque  
and synchronous  
movements only



Counterweighted



**KS118B**  
**KS118R**  
164/100mm

**B=Black BL=Blue R=Red G=Gold W=White**

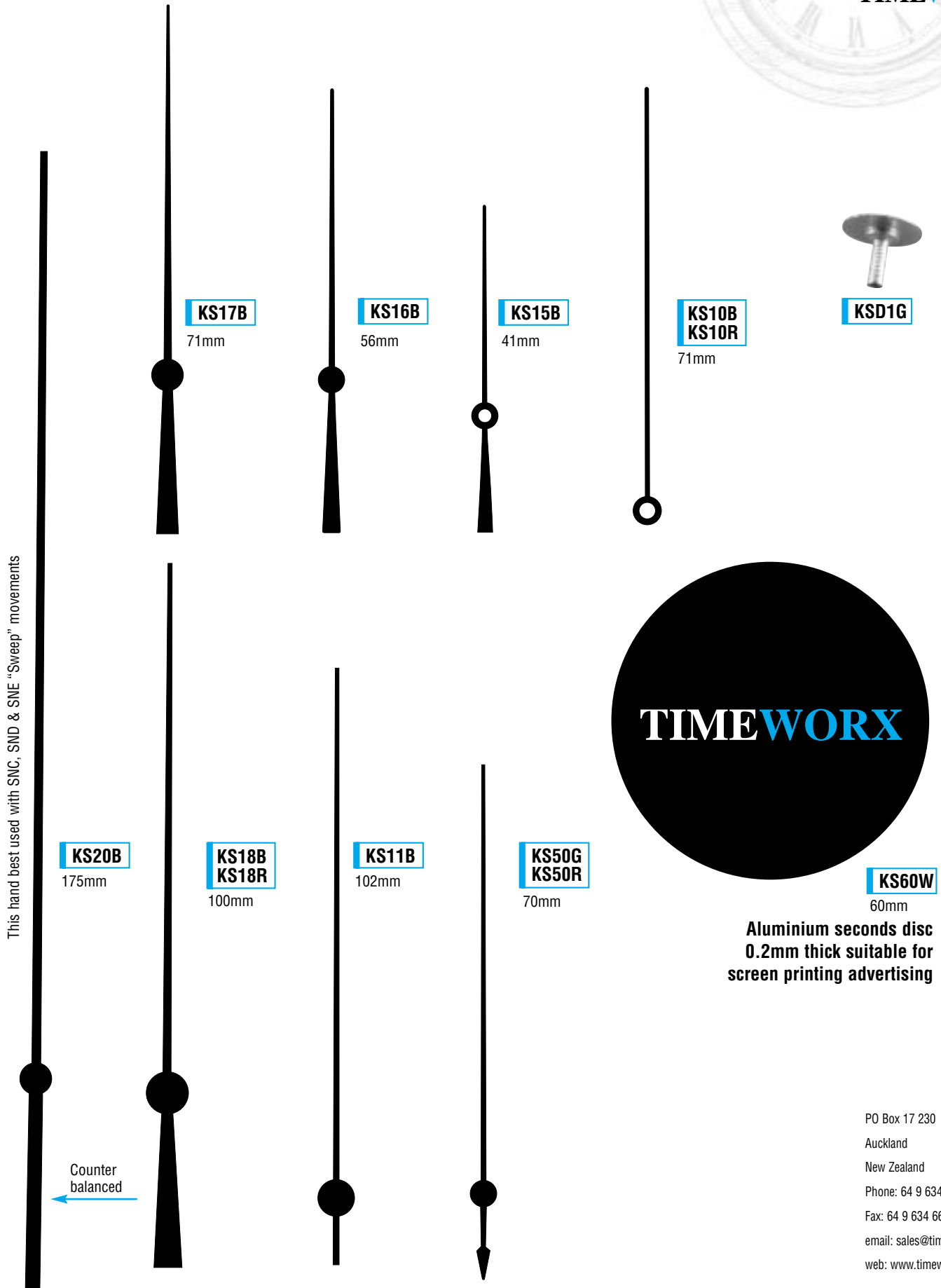
All hands shown approximately full size

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# KS hands - second hands

**B=Black BL=Blue R=Red G=Gold W=White**

**TIMEWORX**



**Aluminium seconds disc  
0.2mm thick suitable for  
screen printing advertising**

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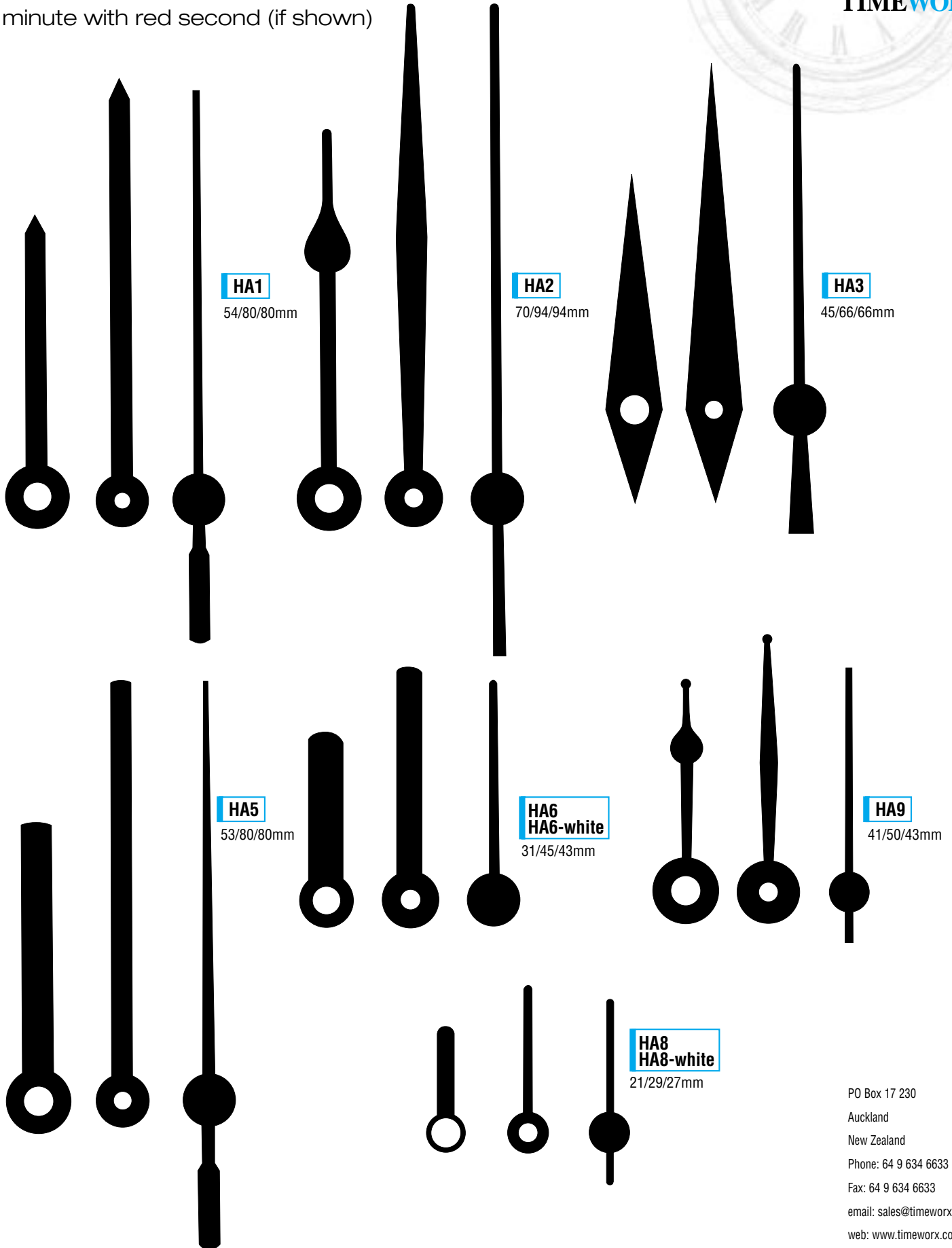
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# Plastic hands

Black hour and minute with red second or white hour and minute with red second (if shown)



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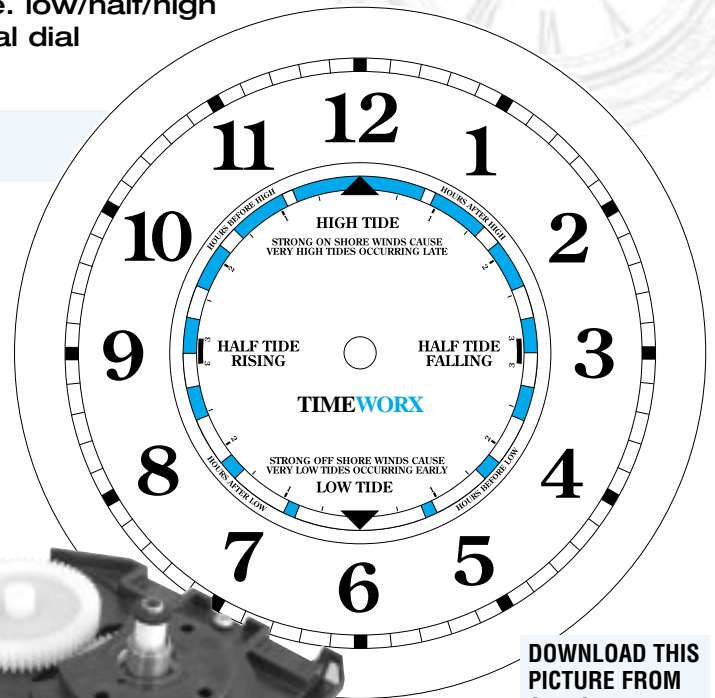
# Hermle Hands and Time & Tide Dial



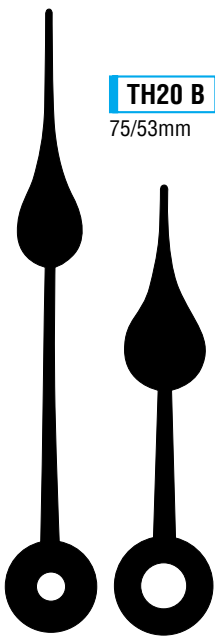
**TIMEWORX**

- High quality German Hermle movement
- Hour, minute and second hand
- Tide indication hand to show state of tide ie. low/half/high
- 1mm shaft length to suit card or sheet metal dial
- Selection of hand styles

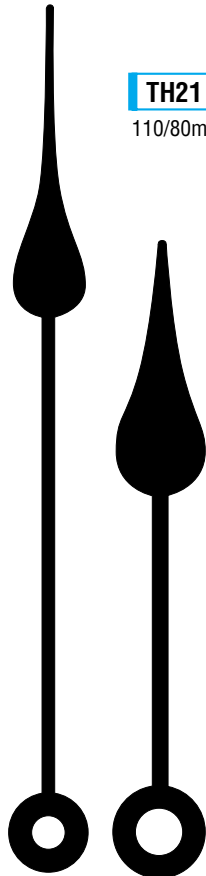
Typical tide clock face to be supplied by customer.  
Download drawing from Timeworx site



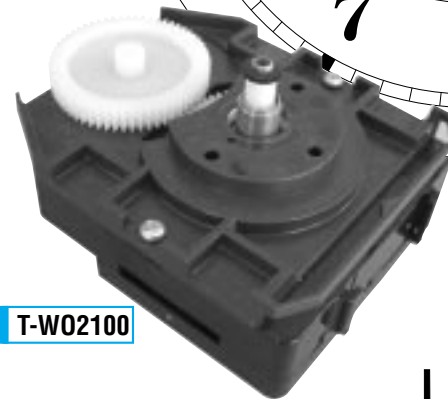
DOWNLOAD THIS PICTURE FROM OUR SITE



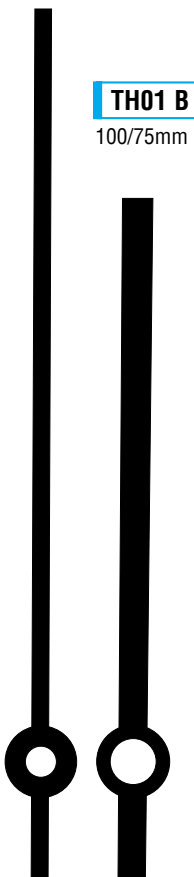
**TH20 B**  
75/53mm



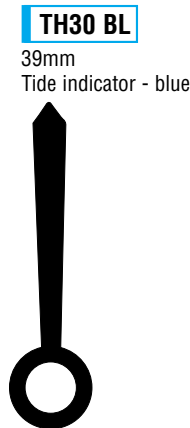
**TH21 B**  
110/80mm



**T-W02100**



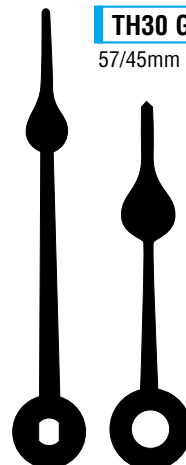
**TH01 B**  
100/75mm



**TH30 BL**  
39mm  
Tide indicator - blue



**TH31 BL**  
72mm  
Tide indicator - blue



**TH30 G**  
57/45mm



**TH50 R**  
80mm

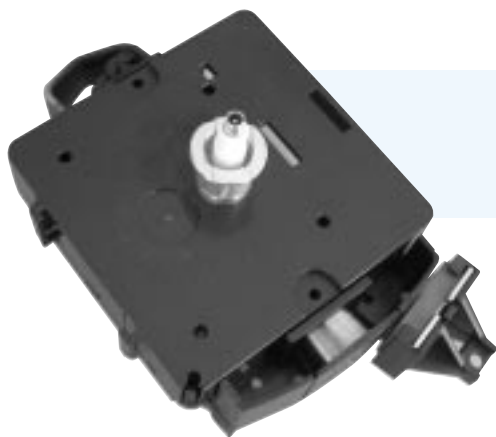


**TH51R**  
80mm

# Hermle Quartz Movements and Accessories



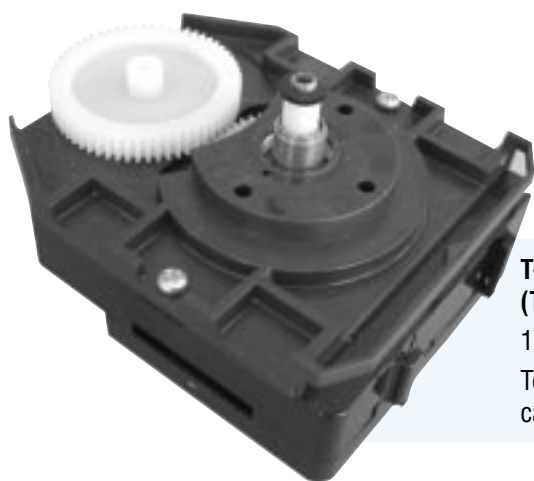
**TIMEWORX**



**T-Q 2200.3  
(Pendulum)**  
10mm shaft



**T-Q 2010  
(Standard)**  
10mm shaft



**T-WO 2100  
(Time & Tide)**  
1mm shaft  
To suit metal or  
card dial only



**T-Q-ROD 360 mm  
T-Q-ROD 760 mm**

**T-Q-GRID**

**T-Q-BOB (70mmø)**

- Purchase rod - 360mm or 760mm long with bob and/or grid to suit your design.
- If making your own pendulum - maximum weight of bob and rod is 120grams.

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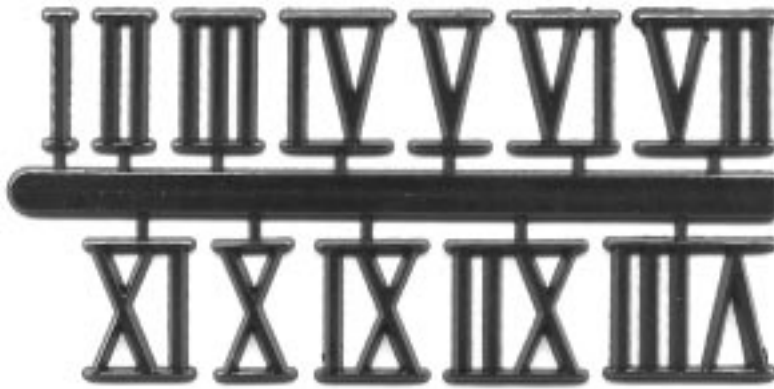
# Self Adhesive Plastic Numerals



**TIMEWORX**

## ROMAN

12mm gold  
12mm black  
20mm gold  
20mm black  
30mm gold  
30mm black



## ARABIC

12mm gold  
12mm black  
20mm gold  
20mm black



## OLD ENGLISH

20mm gold  
25mm gold



## DOTS

9mm black  
9mm gold  
12mm black  
12mm gold



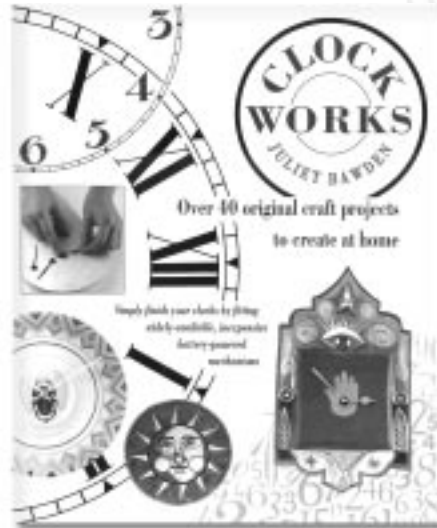
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# Books

**TIMEWORX**

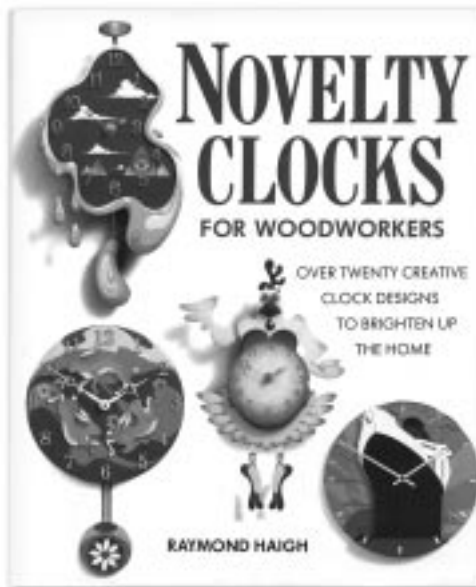
## **CLOCKWORKS - by Juliet Bawden**

- Best school resource book available
- Simple, easy to follow instructions
- Specifically designed for quartz battery operated movements
- Over forty projects for using wide ranging materials including timber, metal, paper mache, pottery, sour dow and much more!
- Sculptural, painted and gilt dials
- Paper clocks, plasterwork, needlecraft
- Painted silk. Applique.
- 160 pages
- Hard cover 235 x 290mm
- Limited new copies available



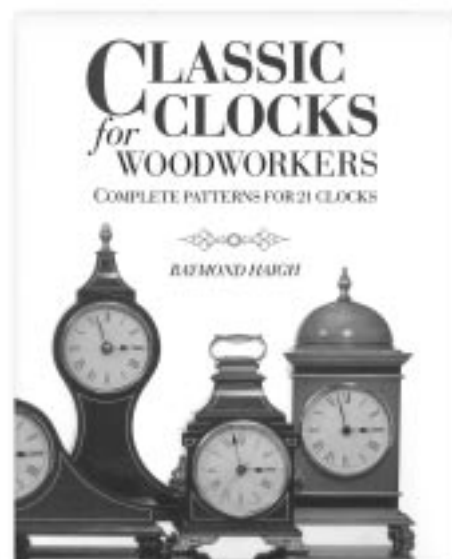
## **NOVELTY CLOCKS FOR WOODWORKERS - by Raymond Haigh**

- Only simple tools, materials and techniques required - no machining needed
- Lots of information on materials, finishing techniques and colouring
- Over twenty amazing projects using hardboard, plywood or foam core board
- Specifically designed for quartz battery operated movements
- Full size trace off patterns
- 127 pages
- Soft/hard cover 215 x 270mm
- OUT OF PRINT. Limited 2nd hand copies available



## **CLASSIC CLOCKS FOR WOODWORKERS by Raymond Haigh**

- 21 designs for mantelclocks
- Step by step instructions
- Illustrated with histories of each clock
- Full bill of materials for each clock
- Guides to tools required and finishing techniques
- Soft/hard cover 260mm x 210mm

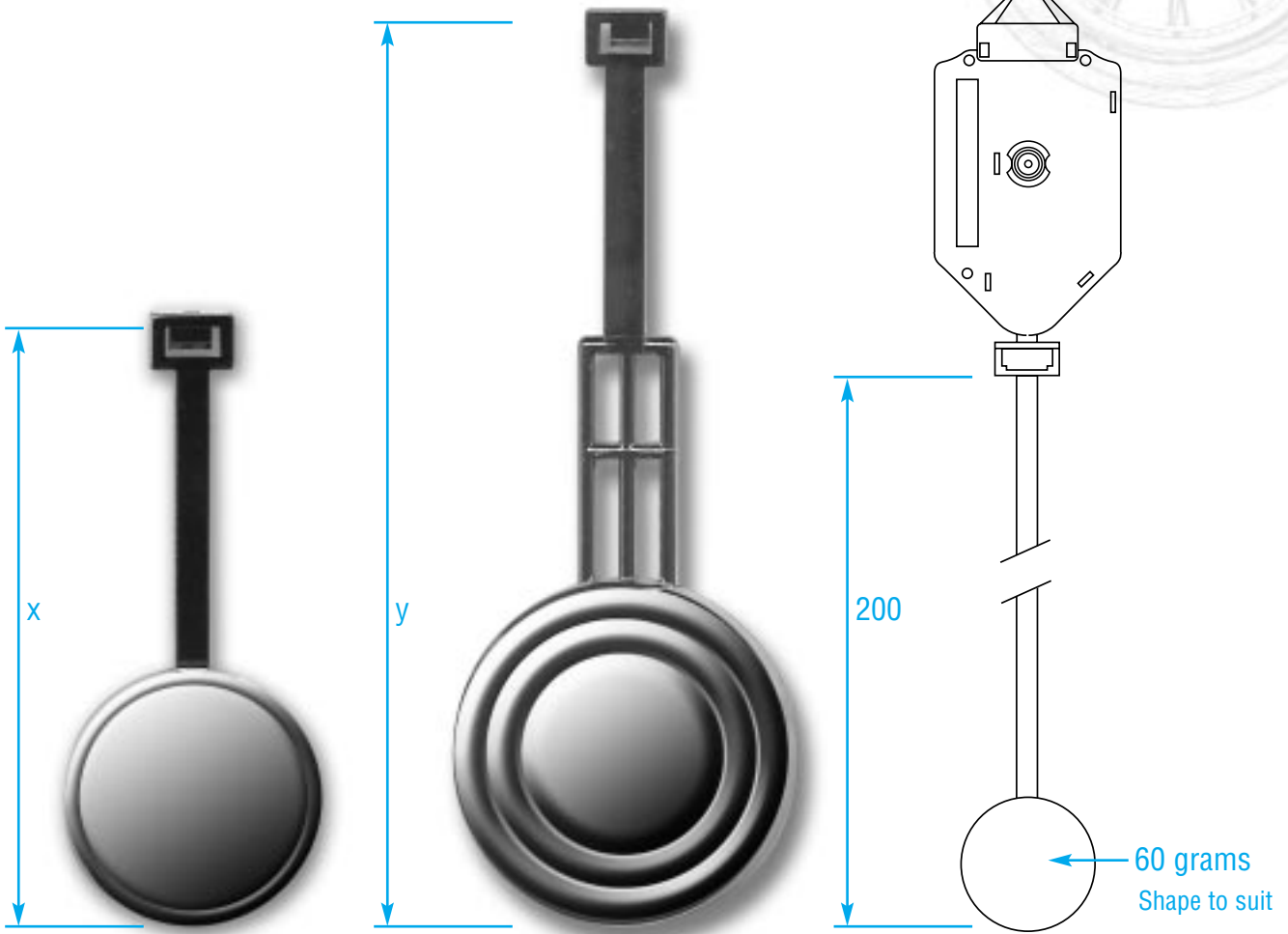


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# Pendulums

Pendulums to suit WP 33 SHD, SHE and SHF quartz movements

**TIMEWORX**



Pendulum 36mm diameter

**P36 PG**

Pendulum 48mm diameter

**P48 PG**

Pendulum in plastic, high polish gold finish and clips into movement  
 Pendulums to suit WP 33 SHD and SHE quartz movements

## HINT:

Make your own pendulum.

Pendulum movement DOES NOT INCLUDE PENDULUM. This may be built to the pendulum specification - max. 200mm long x 60 grams or purchased from TIMEWORX.

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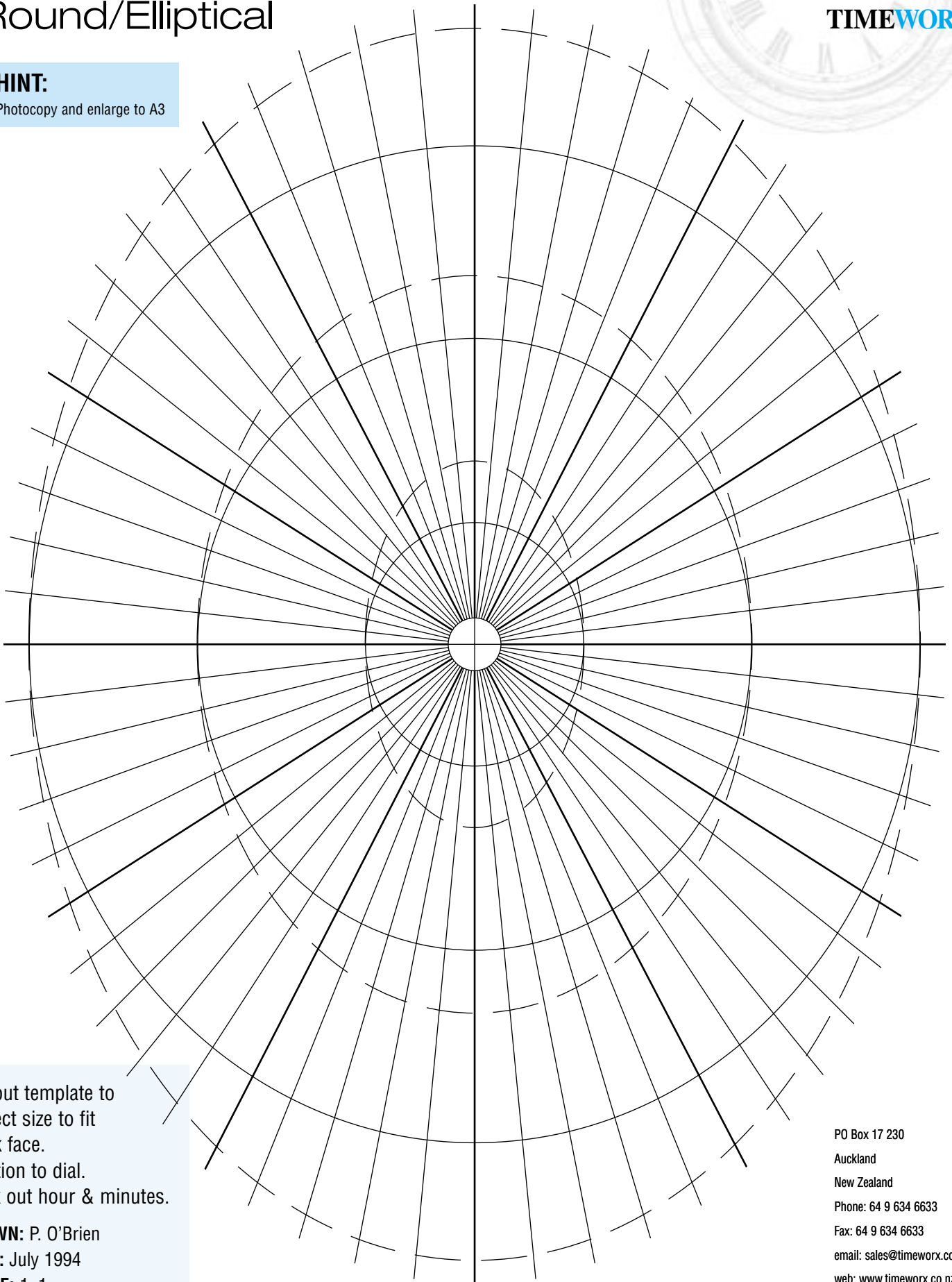
web: www.timeworx.co.nz

# Dial Template

Round/Elliptical

**HINT:**

Photocopy and enlarge to A3



Cut out template to correct size to fit clock face.  
Position to dial.  
Mark out hour & minutes.

**DRAWN:** P. O'Brien  
**DATE:** July 1994  
**SCALE:** 1=1

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# Quartz Wall Clocks



**TIMEWORX**



**WL612** 200mm (10")



**WL611** 350mm (14")



**WL611LD** 350mm (14")



**WL652** 400mm (16")



**WL652LD** 400mm (16")

**CHOOSE FROM 5 DISPLAY OPTIONS  
PROGRAMMED INTO EACH CLOCK**



1 x AA battery supplied

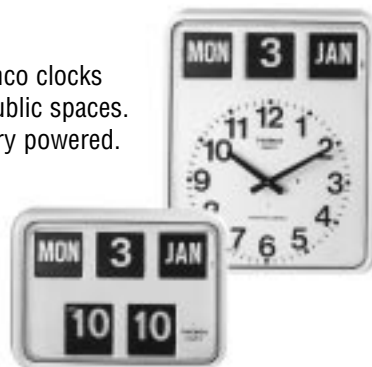
# Large Clocks, Public Clocks

Timeworx stocks or supplies the following mechanical, public and outdoor clocks

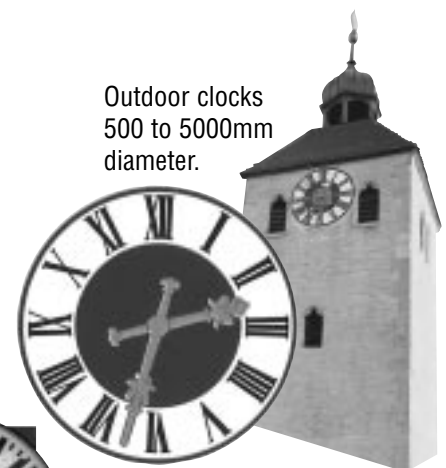


High quality mechanical clocks. We offer the complete range from Kieninger of Germany.

Twemco clocks for public spaces. Battery powered.



Outdoor clocks 500 to 5000mm diameter.



Time clock systems for schools and business.

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