



TIMEWORX

make your own clock

Quartz movements

and accessories

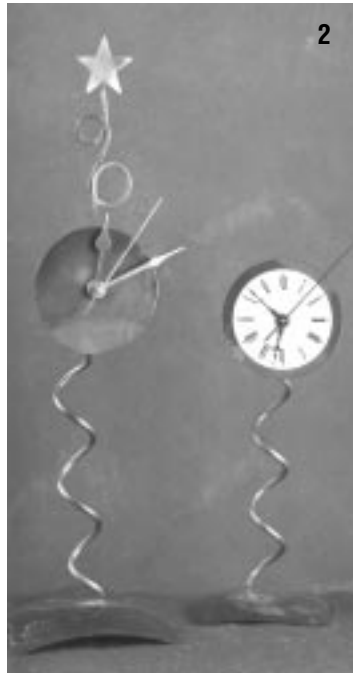
from Timeworx

Get Creative

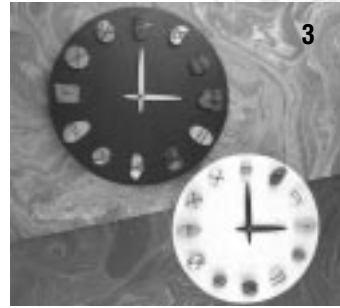
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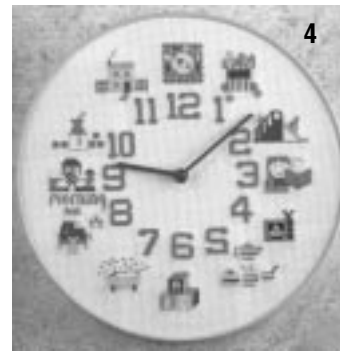
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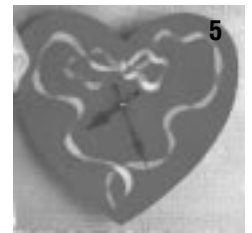
2



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

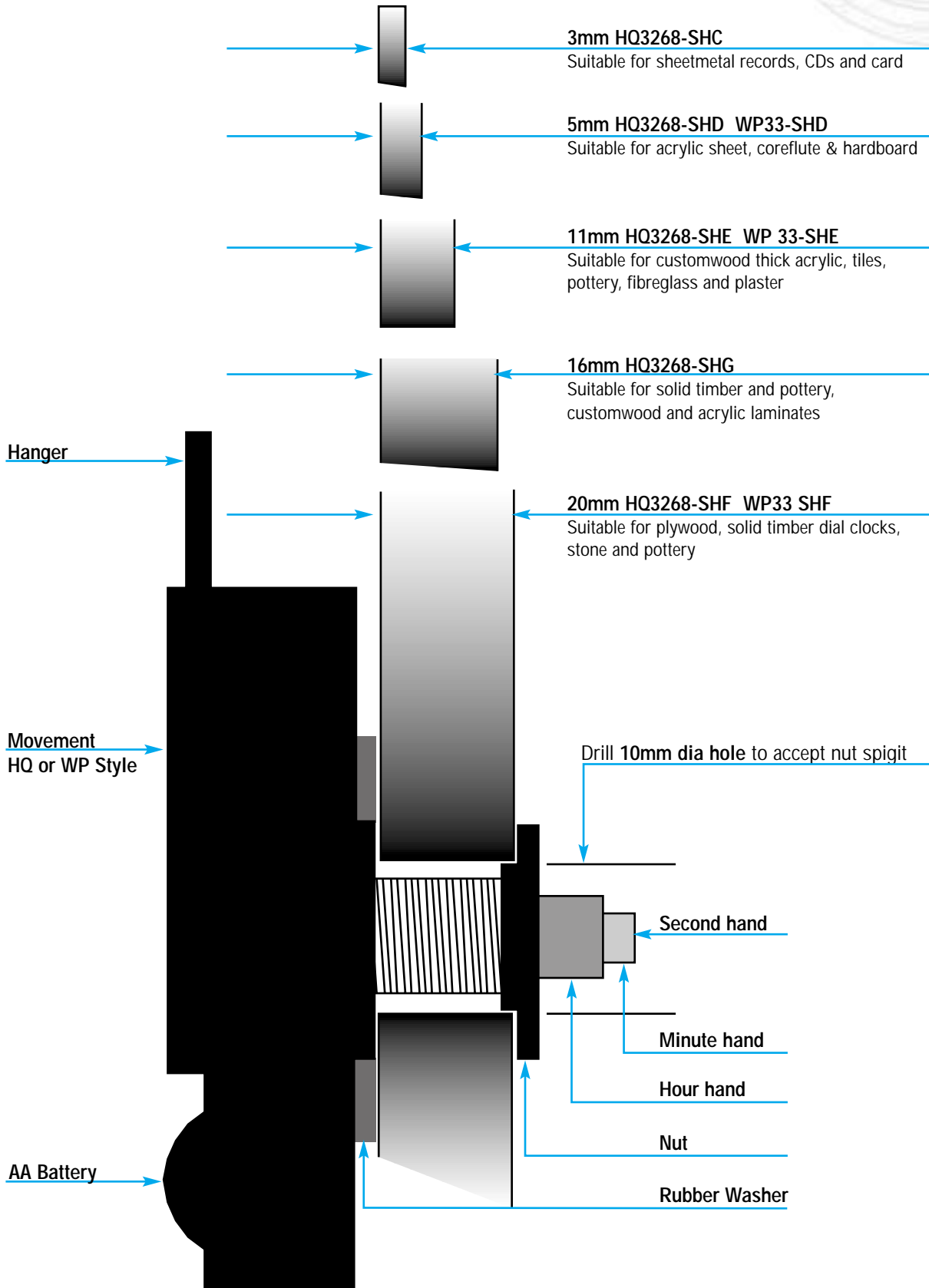
6, 10, 11 - from *Novelty Clocks* - Raymond Haigh

Quartz Movement

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Used on Models HQ3268, WP33 -

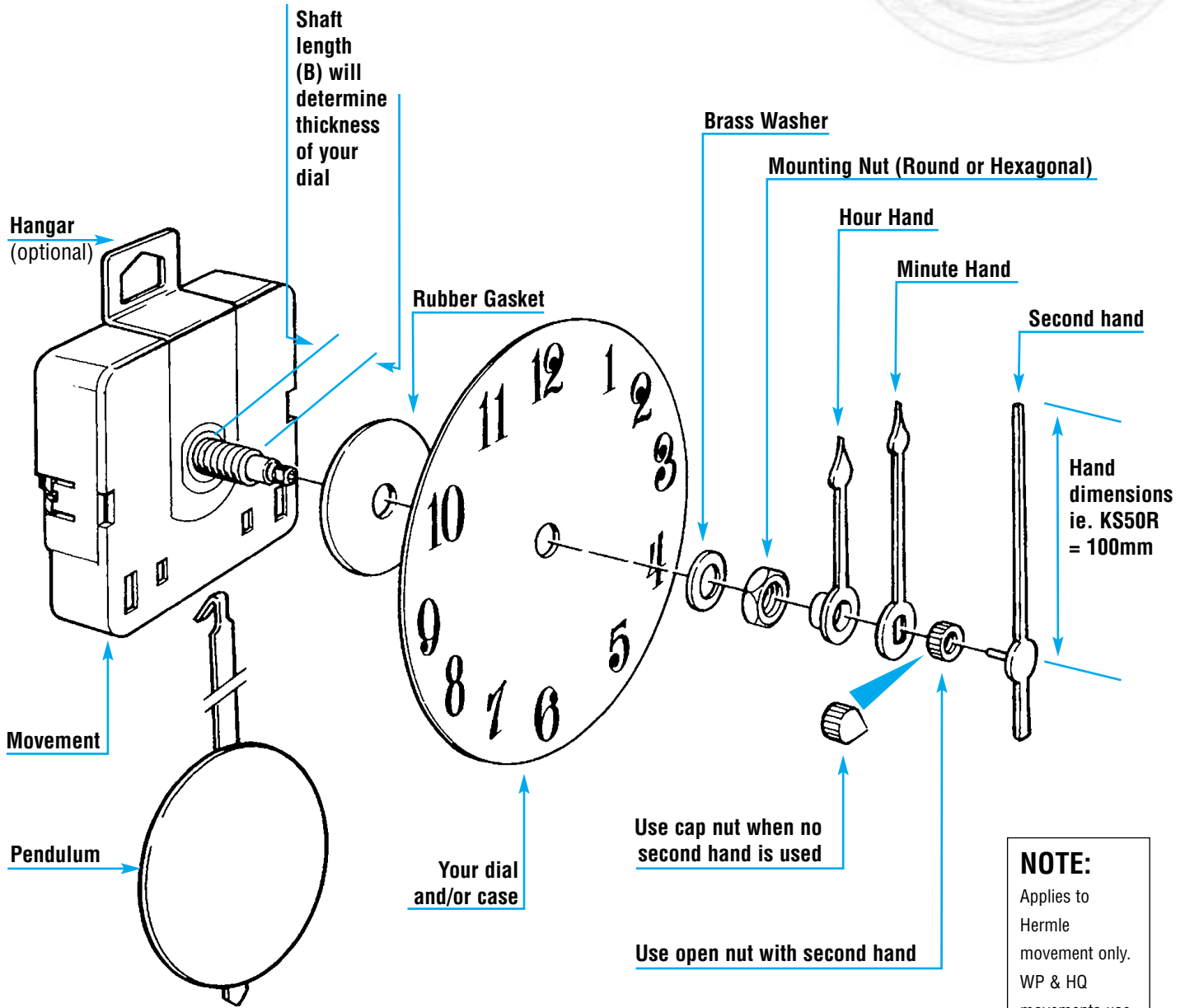
Type SHC, SHD, SHE, SHF and SHG



Mounting

General mounting instructions for battery Quartz regular and pendulum movements

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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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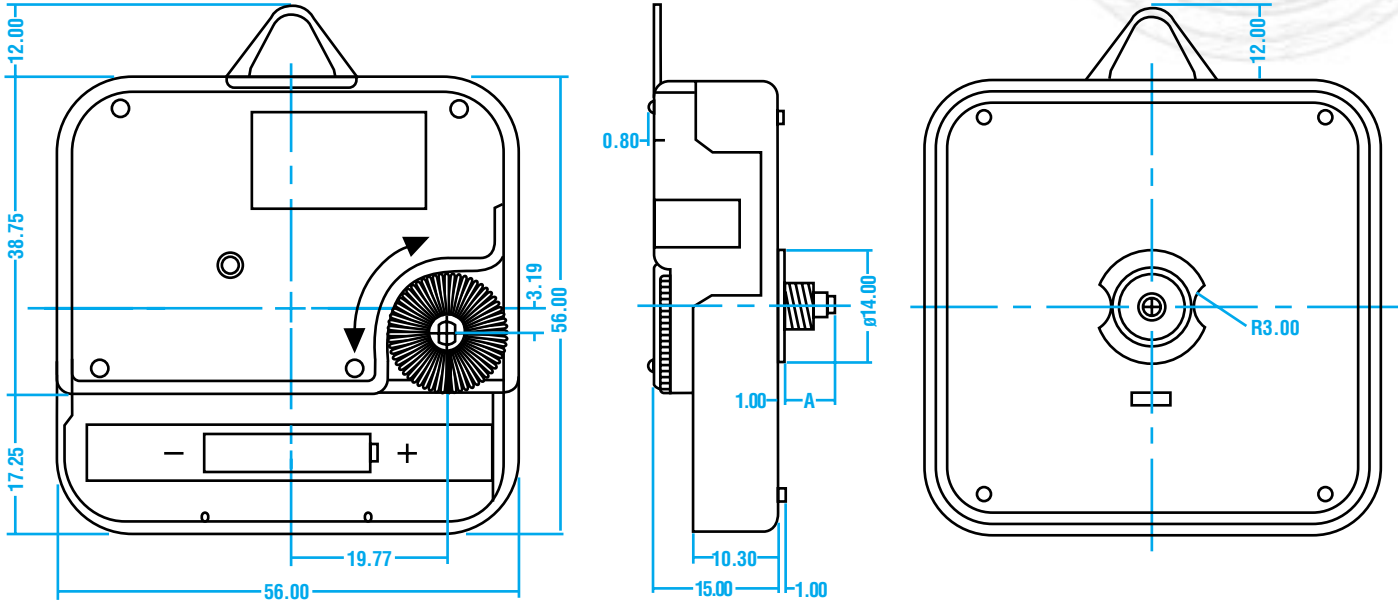
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Quartz Clock Movement



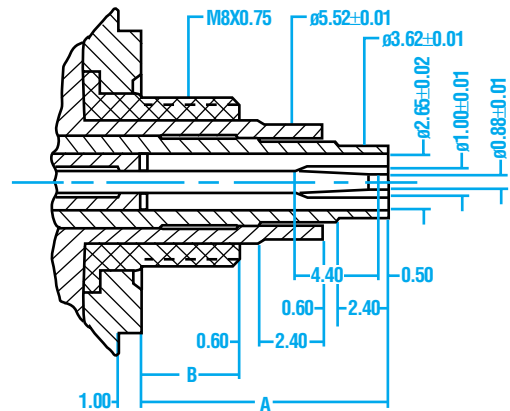
HQ 3268 SHC, SHD, SHE, SHF, SHG

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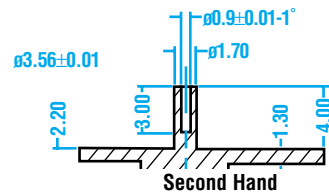
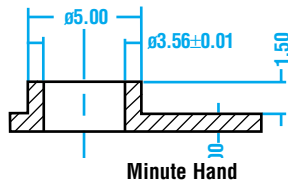
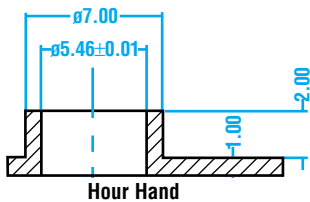


| | HQ 3268 SHC | HQ 3268 SHD | HQ 3268 SHE | HQ 3268 SHF | HQ 3268 SHG* |
|---|-------------|-------------|-------------|-------------|--------------|
| A | 11.5 | 13.0 | 19.0 | 28.2 | 24.0 |
| B | 4.6 | 6.1 | 12.1 | 21.0 | 16.0 |

* The SHG shaft length B=16mm!



PLASTIC HAND



SPECIFICATIONS

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

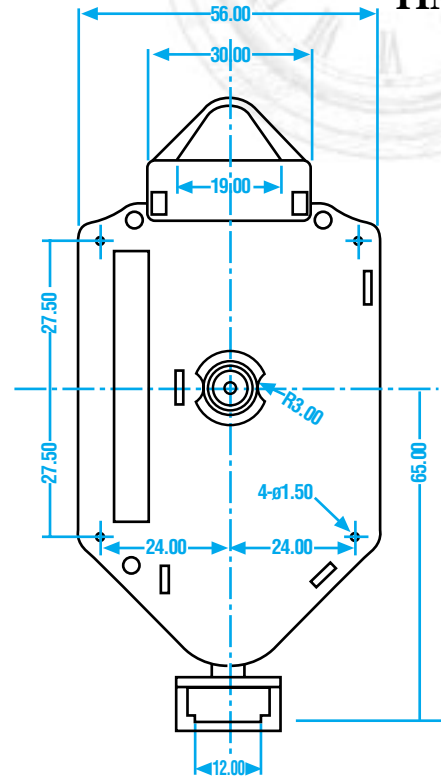
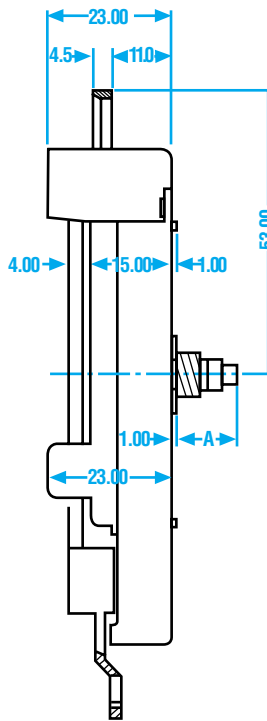
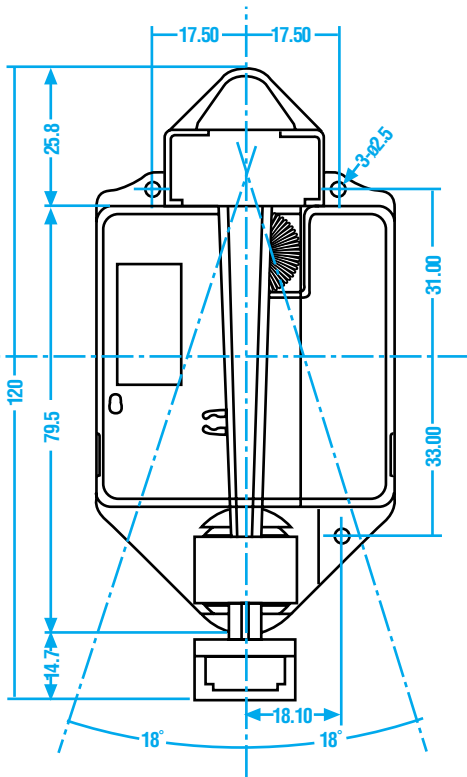
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Quartz Pendulum Clock Movement

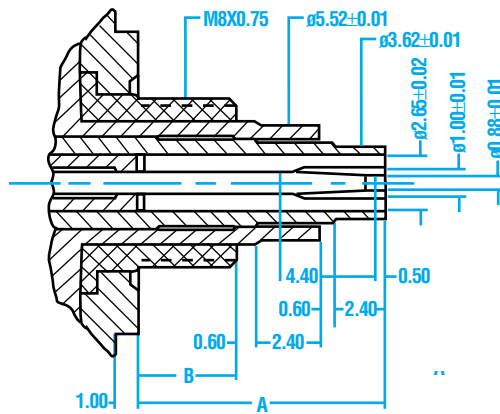


WP33 SHD, SHE, SHF

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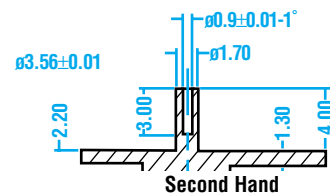
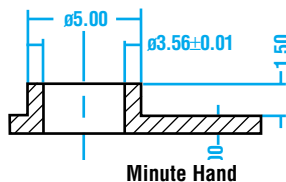
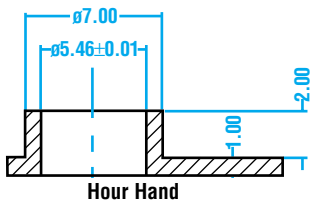
| | HQ 3268 SHD | HQ 3268 SHE | HQ 3268 SHF |
|---|-------------|-------------|-------------|
| A | 13.0 | 19.0 | 28.2 |
| B | 6.1 | 12.1 | 21.0 |



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)

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General purpose hands

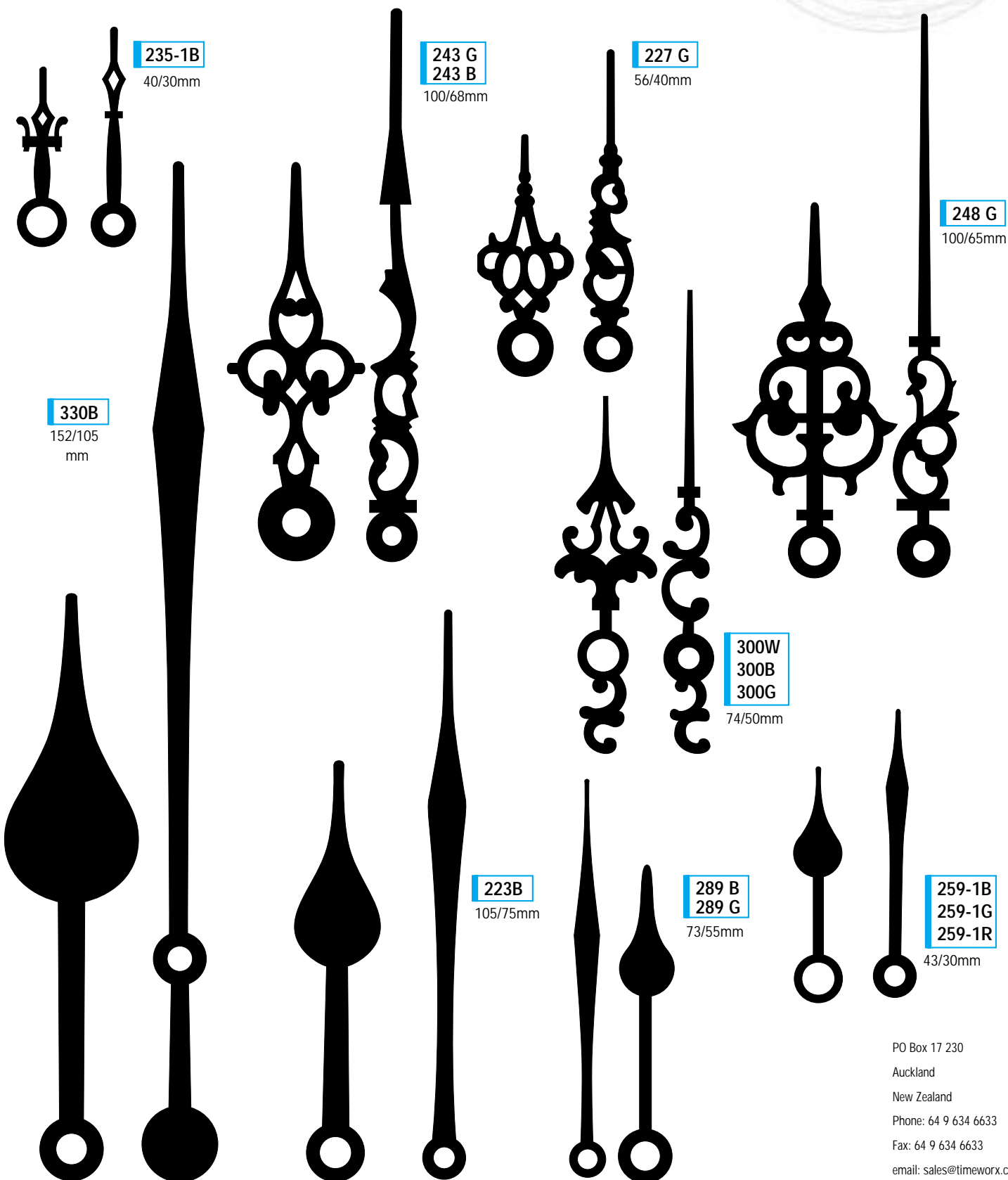


ANODISED ALUMINIUM WITH BRASS BUSHING

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

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



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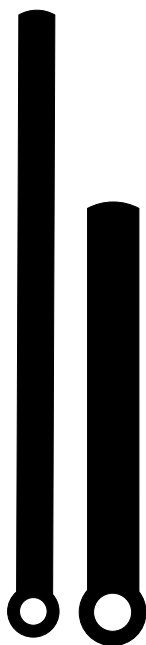
General purpose hands

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

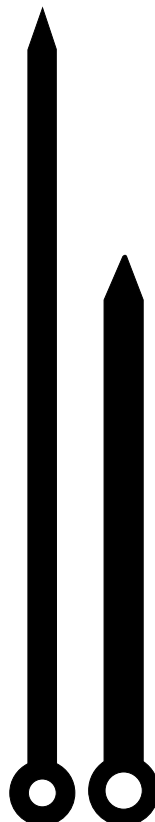
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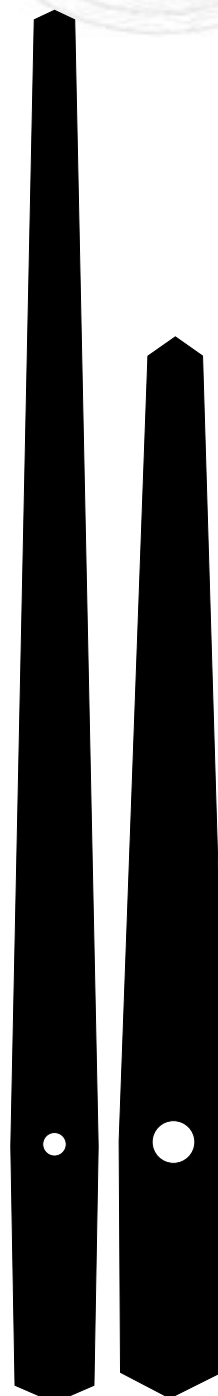
247 B
81/50mm



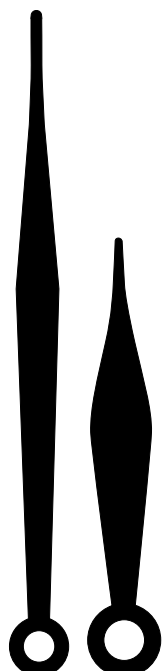
215 B
215 W
81/55mm



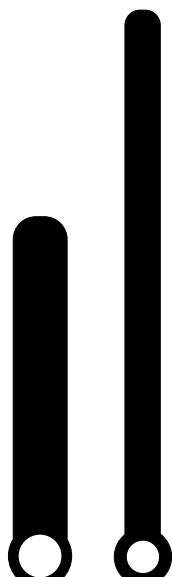
214B
214S
214G
105/72mm



21 B
154/110mm



222-1 B
86/54mm



282W
75/43mm



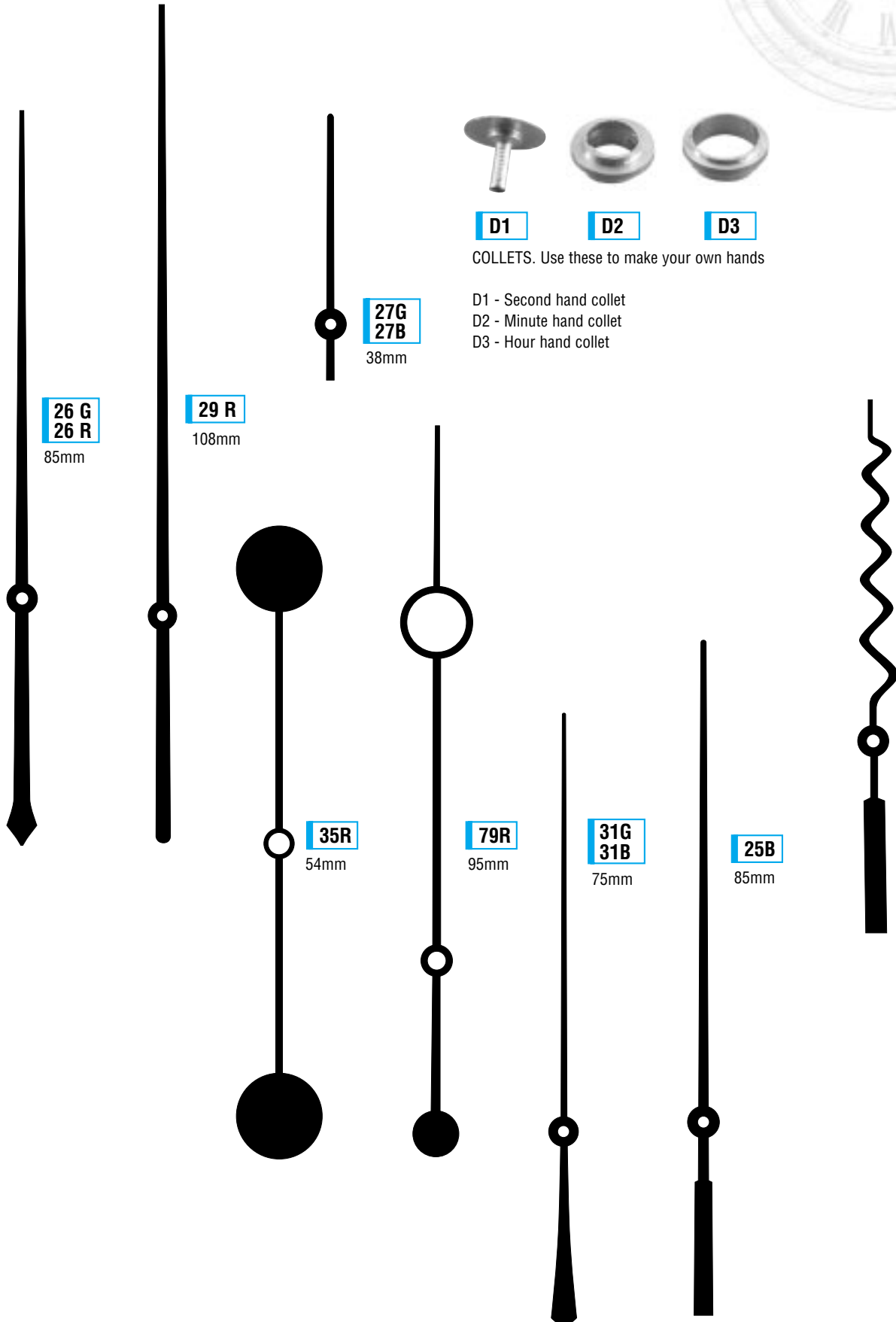
297W
297B
50/22mm

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General purpose hands

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

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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

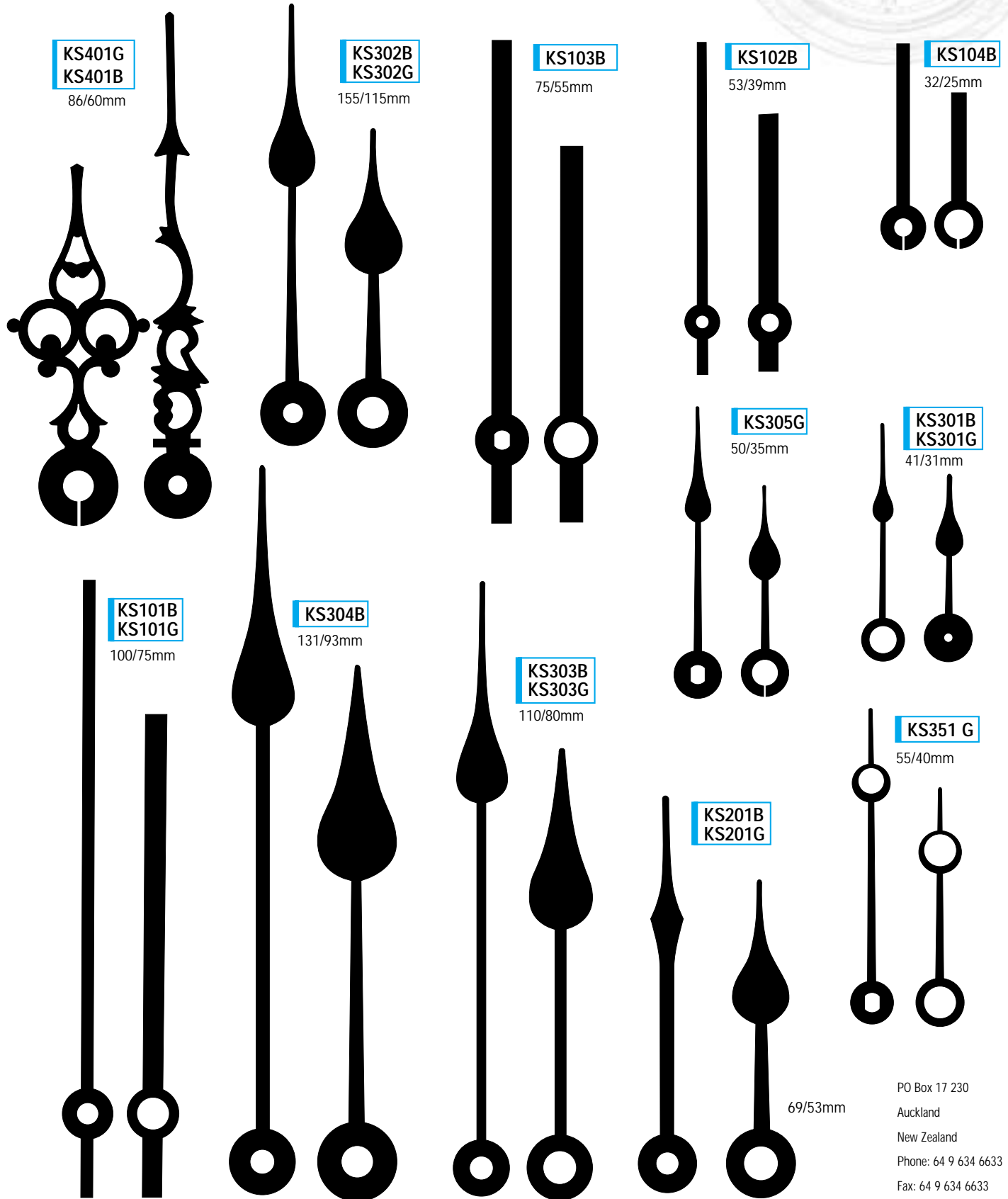
25 B
85mm

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

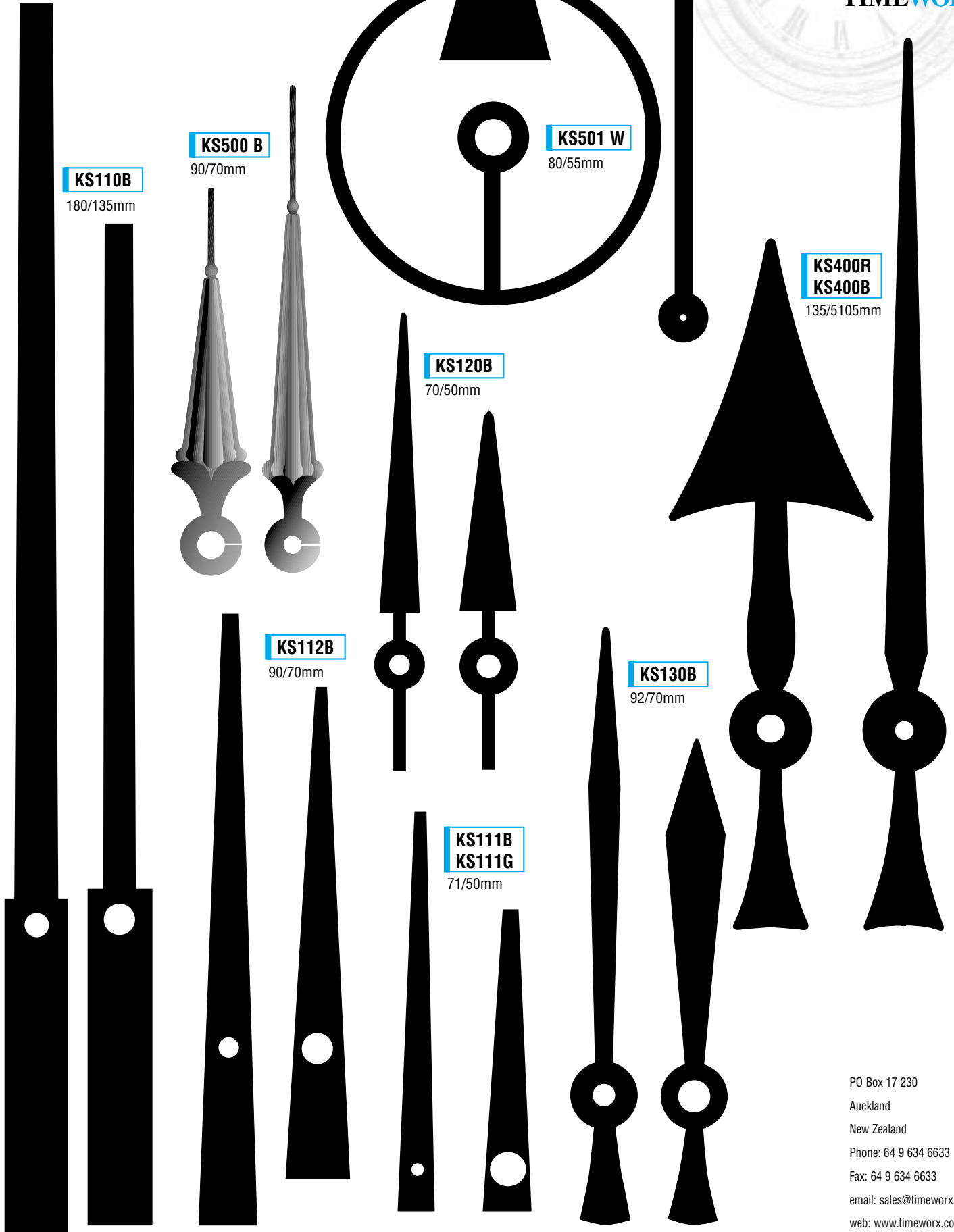


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KS hands

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

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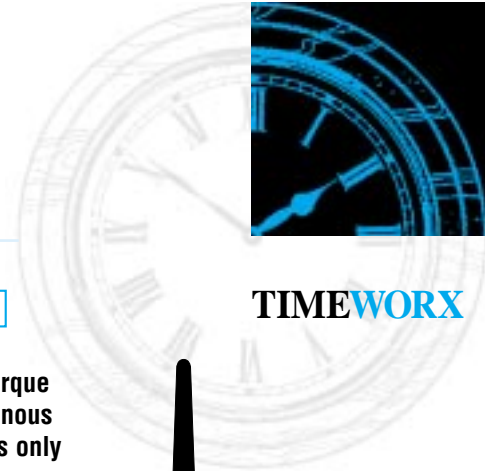


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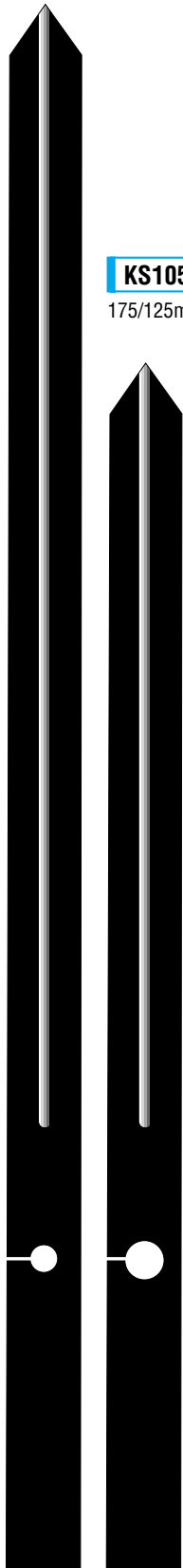
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KS hands

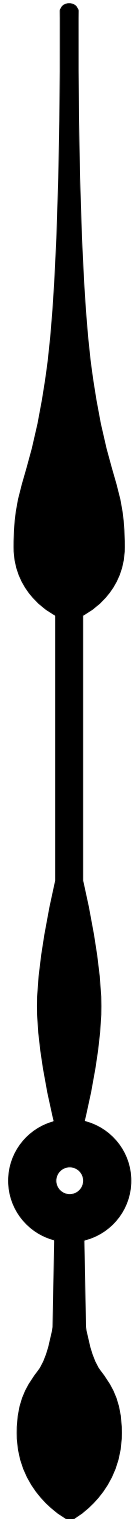
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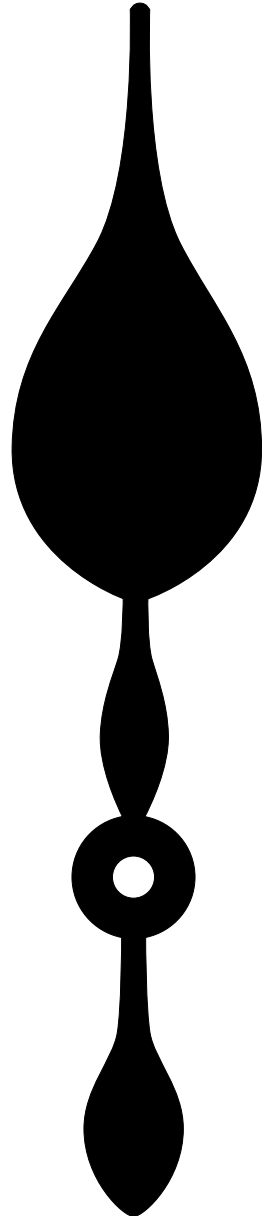
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KS105B
175/125mm

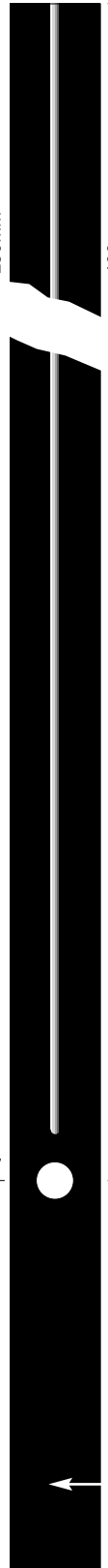
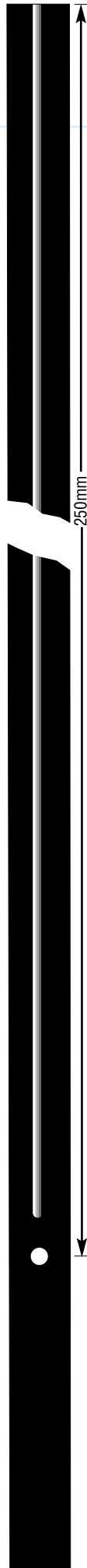


KS320B
155/115mm



KS106 B
250/190mm

For high torque and synchronous movements only



KS118B
KS118R
164/100mm

Counterweighted

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

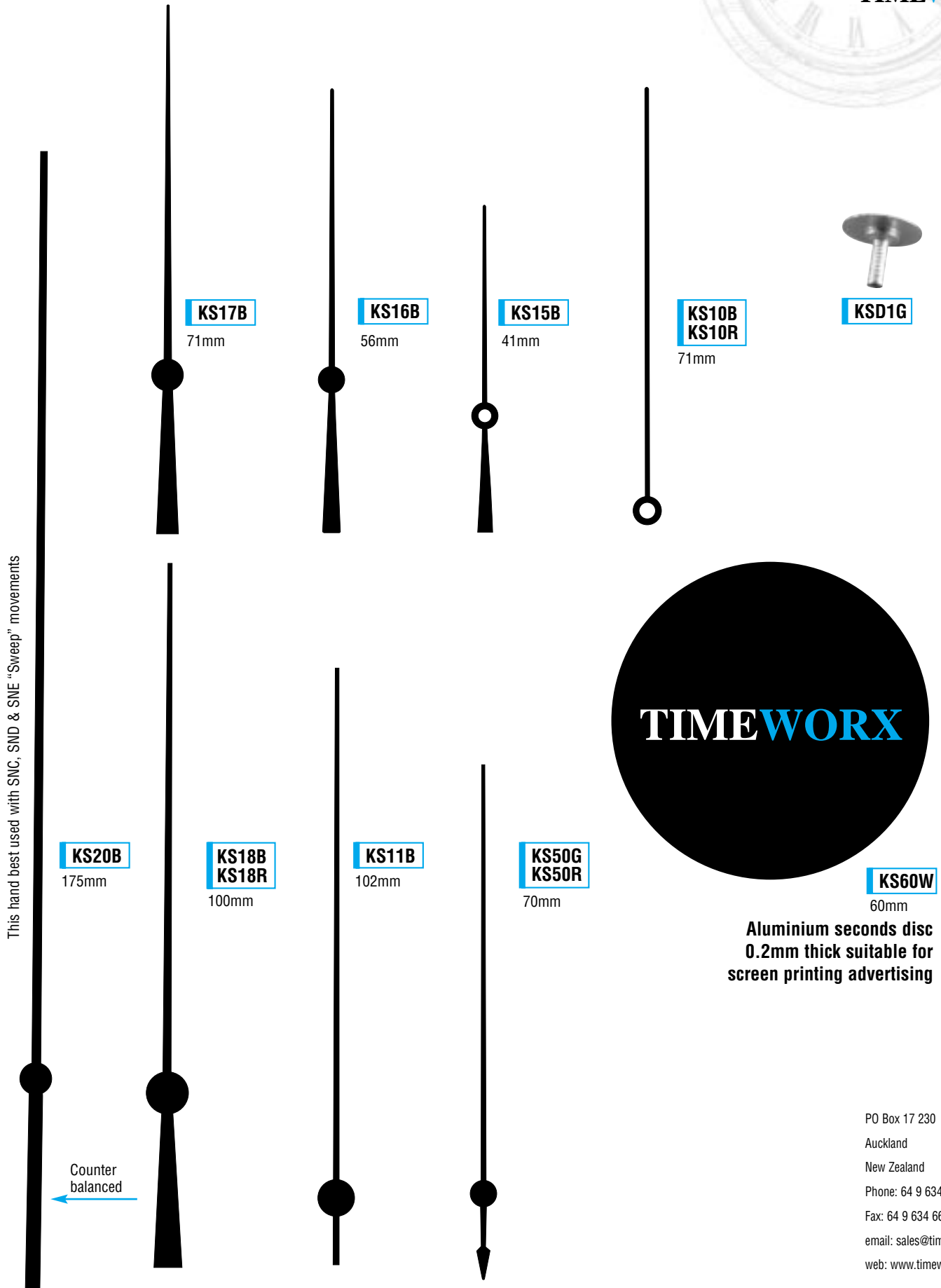
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All hands shown approximately full size

KS hands - second hands

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

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

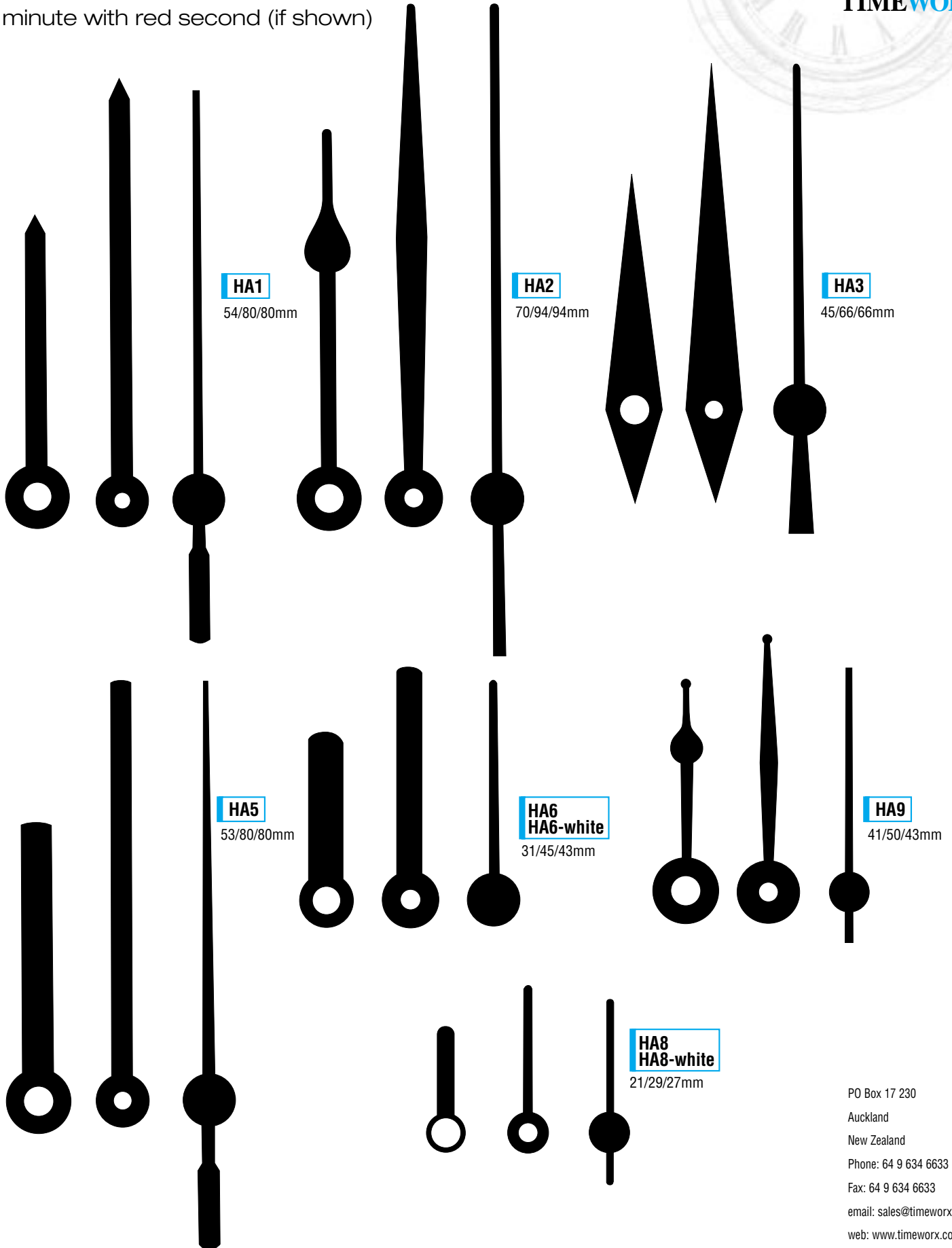
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Plastic hands

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



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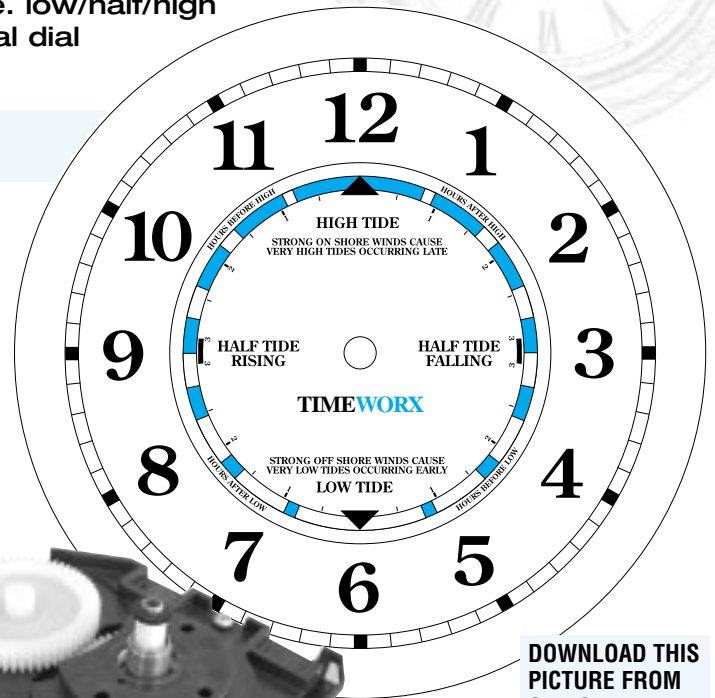
Hermle Hands and Time & Tide Dial



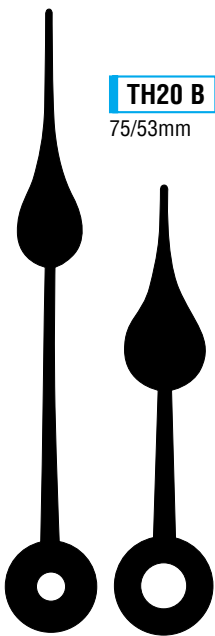
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- High quality German Hermle movement
- Hour, minute and second hand
- Tide indication hand to show state of tide ie. low/half/high
- 1mm shaft length to suit card or sheet metal dial
- Selection of hand styles

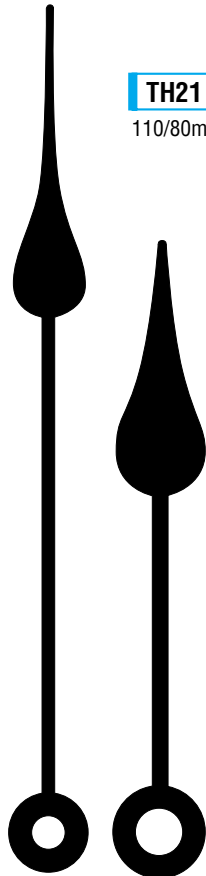
Typical tide clock face to be supplied by customer.
Download drawing from Timeworx site



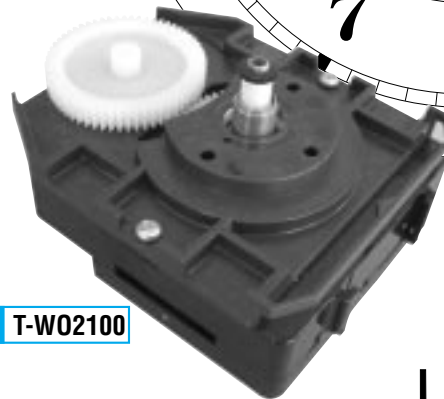
DOWNLOAD THIS PICTURE FROM OUR SITE



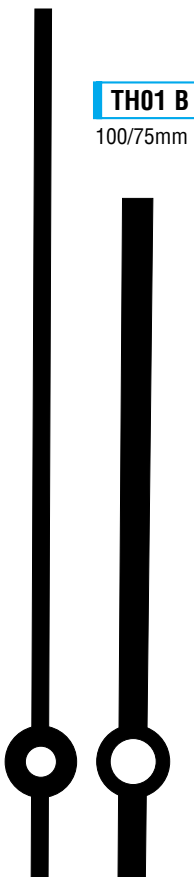
TH20 B
75/53mm



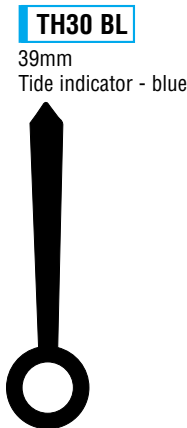
TH21 B
110/80mm



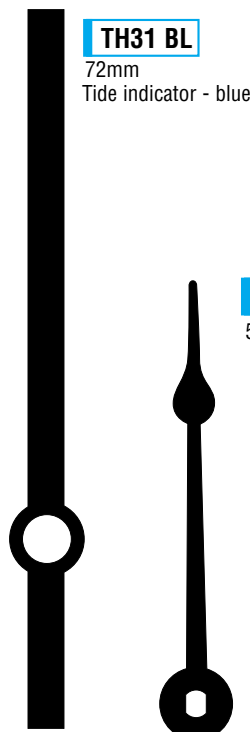
T-W02100



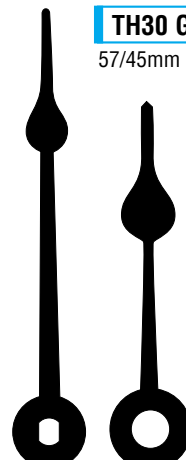
TH01 B
100/75mm



TH30 BL
39mm
Tide indicator - blue



TH31 BL
72mm
Tide indicator - blue



TH30 G
57/45mm



TH50 R
80mm

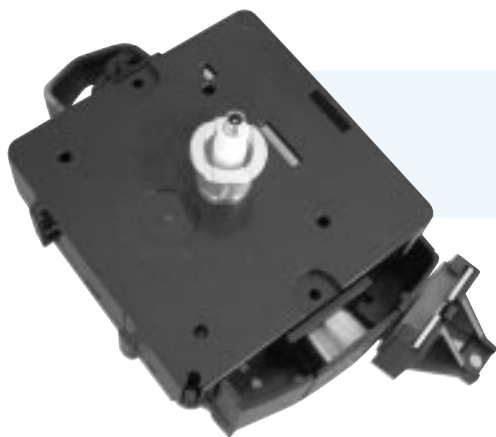


TH51 R
80mm

Hermle Quartz Movements and Accessories



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**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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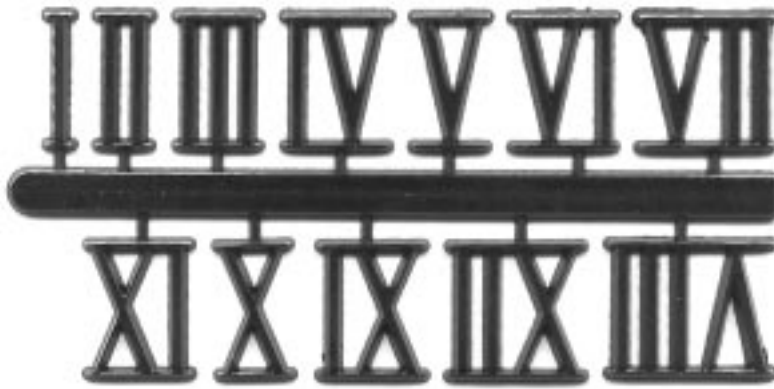
Self Adhesive Plastic Numerals



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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



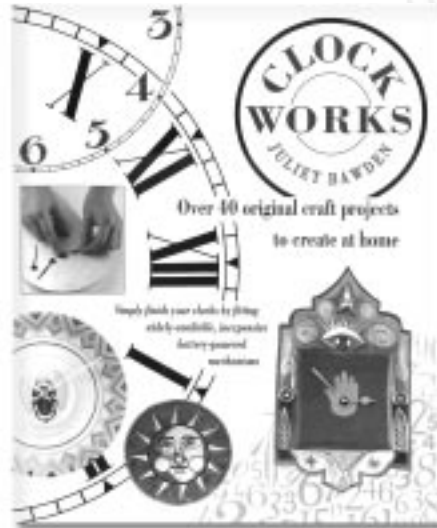
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Books

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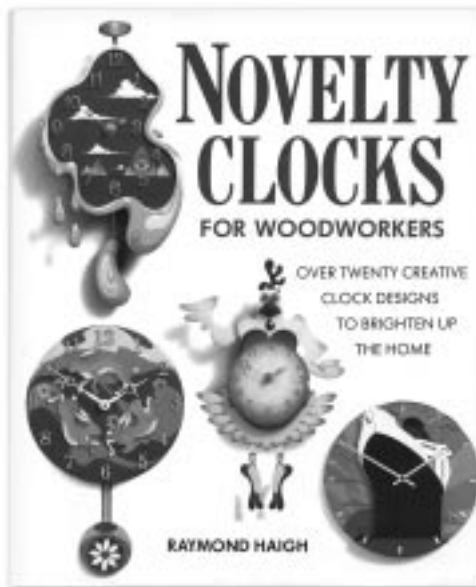
CLOCKWORKS - by Juliet Bawden

- 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



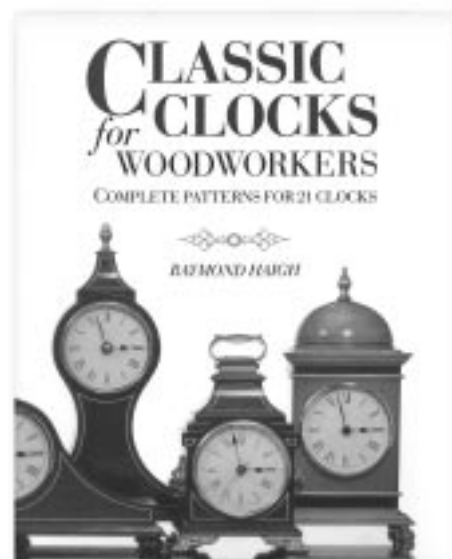
NOVELTY CLOCKS FOR WOODWORKERS - by Raymond Haigh

- 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

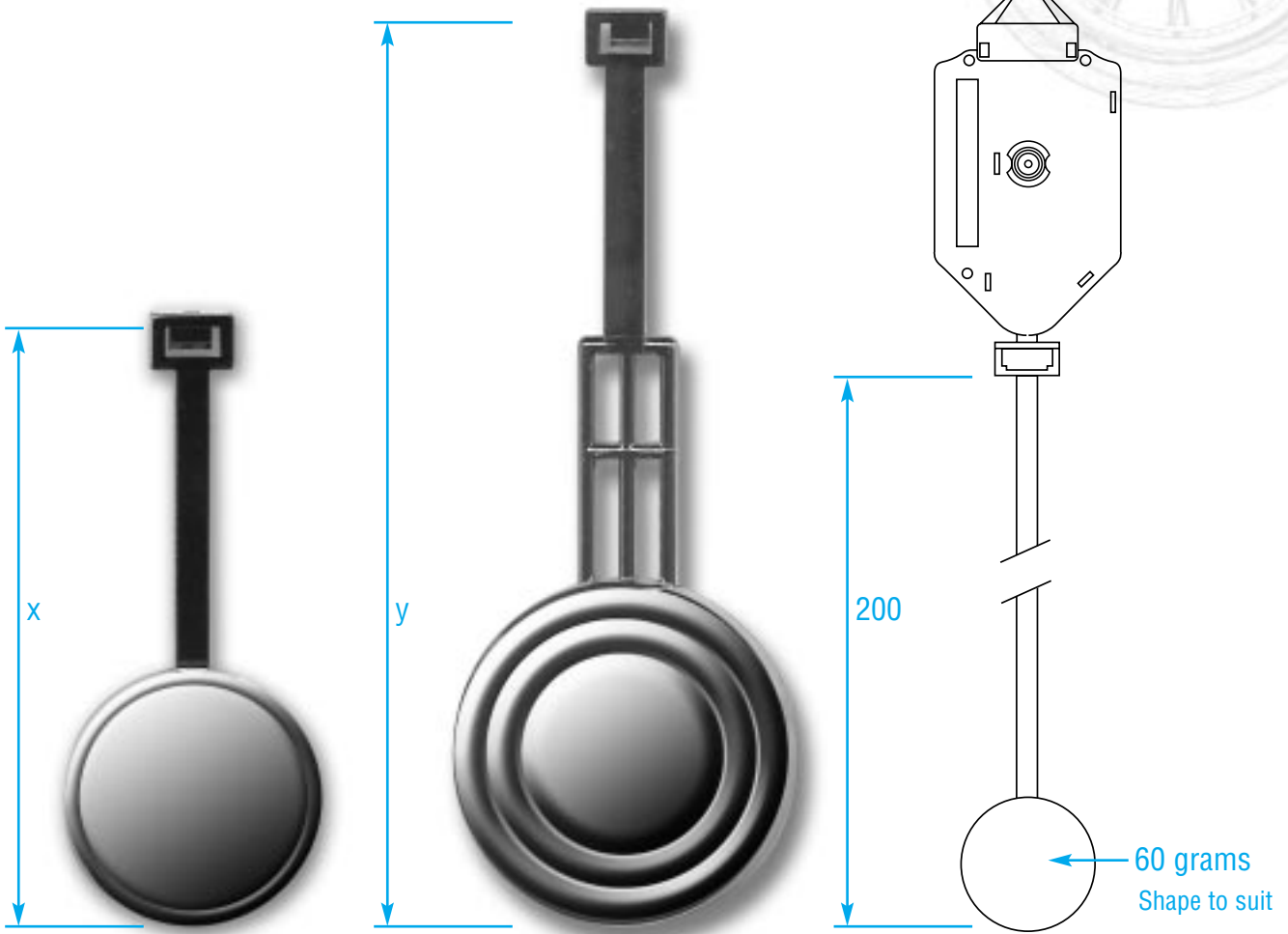


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Pendulums

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

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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.

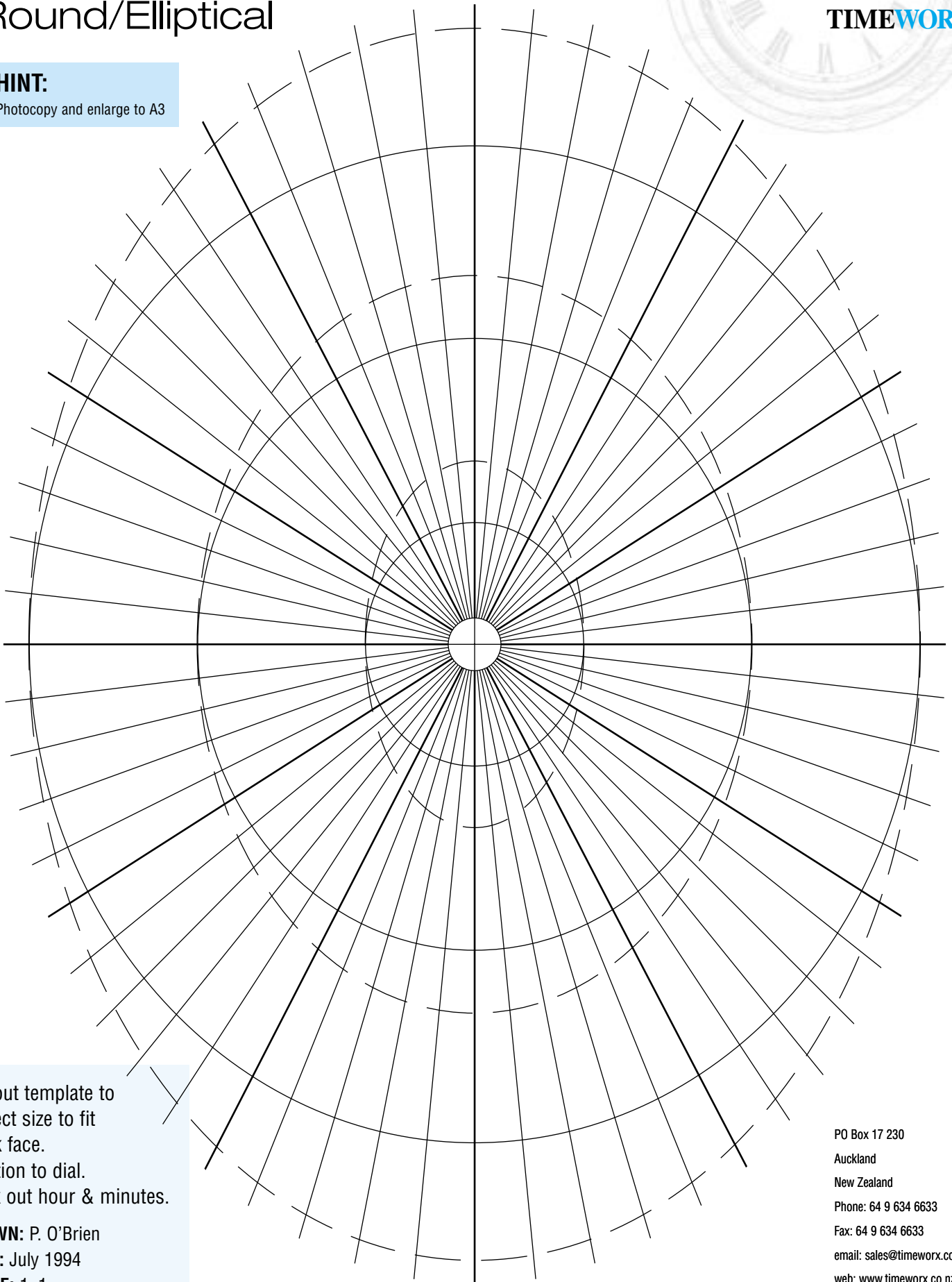
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Dial Template

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



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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

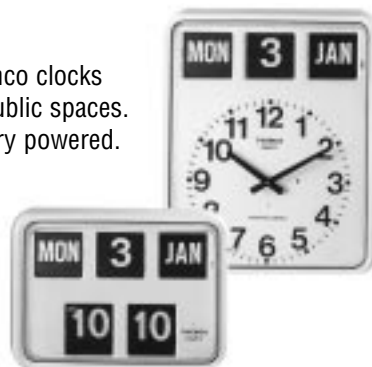
Large Clocks, Public Clocks

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

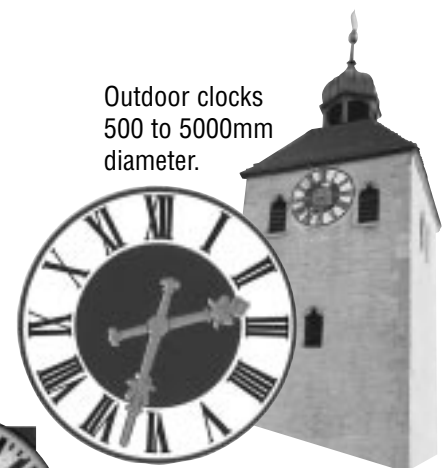


High quality mechanical clocks. We offer the complete range from Kieninger of Germany.

Twemco clocks for public spaces. Battery powered.



Outdoor clocks 500 to 5000mm diameter.



Time clock systems for schools and business.

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