# Window Balance System



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#### Application / Description

Narrow, tension spring balance and friction foot system for aluminum double hung windows. Maximum sash weight of 22Kg.

#### **Features and Specifications**

- Five weight ranges cater for sash weights of up to 22Kg
- Wide range of lengths suit sashes from 350mm to 1100mm high
- Oil tempered galvanised carbon steel tension spring
- High quality Tension foot with stainless steel bow spring and adjustable polymer friction pads.
- Tough ABS black polymer outer casing
- Wide range of lengths and weights available
- Range of adjustable tension feet to suit various sections
- Shock absorbing stops available
- Australian Made

Available in Trade Pack Only.

#### Standard Packs, Finishes and Ratings

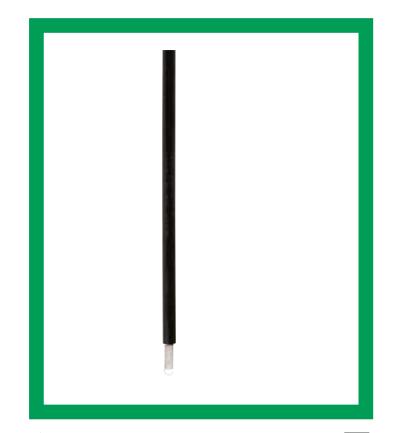
Range	End Cap Colour	Sash Weight Rating
51 Range	Green Cap	Up to 6.0 Kg
61 Range	Grey Cap	6.0 Kg to 9.25 Kg
71 Range	Brown Cap	9.25 Kg to 11.0 Kg
81 Range	Red Cap	11.0 Kg to 18.0 Kg
91 Range	Blue Cap	18.0 Kg to 22.0 Kg

Spring Sash Balances are supplied with black coloured tubes.

#### **Non Standard Finishes**

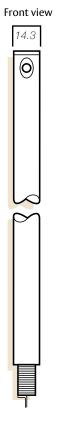
Other finishes are not available

Accessories	
Standard foot – 2.5 mm pads	W635100
J foot assembly	W635500
Narrow foot assembly	W635200
W foot assembly	W635900
Whitco sash lifts	
Whitco Window Locks	







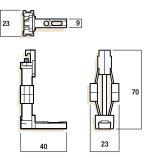


Side view



Accessories

Standard foot assembly 2.5mm



W635100

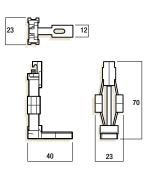








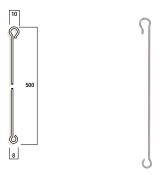
J foot assembly



W635500



SBS 500mm accessory spring steel hook SBS 325mm accessory spring steel hook W492800 W493100



### Ordering

#### Size Chart Min Sash Max Sash Green End Cap Grey End Cap Brown End Cap Red End Cap Blue End Cap Tube Height Height Length Up to 6.0 Kg 6.0 Kg to 9.25 Kg 9.25 Kg to 11.0 Kg 11.0 Kg to 18.0 Kg 18.0 Kg to 22.0 Kg 350 400 245 W630251 400 450 295 W630451 W630461 450 500 345 W630651 W630661 550 W630881 500 395 W630851 W630861 W631081 550 600 445 W631051 W631061 650 495 W631261 W631271 W631281 600 W631251 700 W631461 W631481 W631491 650 545 W631451 W631471 700 750 595 W631651 W631661 W631671 W631681 W631691 750 800 645 W631851 W631861 W631871 W631881 W631891 800 850 695 W632051 W632061 W632071 W632081 W632091 900 W632251 W632261 W632271 W632281 W632291 850 745 950 795 W632451 W632491 900 W632461 W632471 W632481 W632651 W632691 950 1000 845 W632661 W632671 W632681 1000 1050 895 W632861 W632871 W632881 W632891 1050 1100 945 W633061 W633071 W633081 W633091 1100 1150 995 W633261 W633271 W633281 W633291

#### Application / Description

Narrow, fully sealed variable pitch spiral and torsion spring balance and foot system for timber or aluminum double hung windows.

#### **Features and Specifications**

- Fully sealed construction
- Oil tempered carbon steel torsion spring
- Zinc plated variable pitch spiral
- Metal zinc diecast fixing plug
- Tough ABS polymer outer casing available in Black
- Corrosion resistant stainless steel sash foot plate
- Comprehensive range of tube lengths and balance weight
- Adjustable spring tension to suit application
- Shock absorbing stops available
- Range of feet available
- Individual balances in Trade packs available
- Tension key required for adjustable foot version
- Australian Made

#### Standard Packs / Finishes

Foot options - available with either:

- Standard foot Attached to spiral rod, includes accessory kit.
- Ready to accept adjustable foot Foot sold separately and accessory pack sold separately.

#### **Finishes**

Available in Black tube colour.

#### **Non Standard Finishes**

Other finishes are not available.

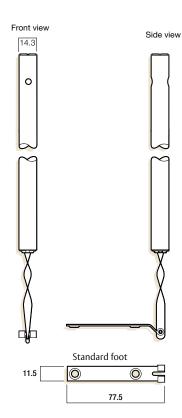
#### Keying

It is recommended that spiral balances are supported in a 15mm x 15mm rebate.









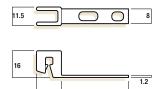
#### Performance

Weight Recommended sash weights	
Weight Range	Rating
Weight range 1	2.25 to 7.25 Kg
Weight range 2	7.25 to 10 Kg
Weight range 3	10 to 14 Kg

#### Accessories

13.5

Standard adjustable foot for Weight Range 1-3 (2.25 to 14 kg): W615100



Spiral long stop – polymer

37.5

RO

W493000

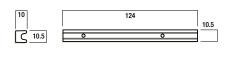
W492700

Spiral short stop – polymer. Order as part of kit

1.5

8

W492900



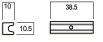
Tension key spring wire



TFD foot:

11.5

16



0

R

13.5 14.5



Spiral accessory kit: includes top and bottom stop and fixing screws Black W492900

W615200



#### **Spiral Balance Selection Guide**

#### Step A - Whitco Product Model

Whitco Spiral Balance product model is W61

#### Step B - Select Balance Number

If replacing an existing balance, measure the body length and match to Body Length 'L' Dimension.

#### Step B1 - Top Sash Balances

- 1. Measure the overall height of the top sash (including horns, if used). This is the Closed 'C' Dimension.
- 2. Refer to appropriate Closed 'C' dimensions on size chart and select the Balance Number matching the Closed 'C' Dimension.
- 3. If there is not an exact match to Closed 'C' Dimension go to the next smaller Balance Number e.g. For Closed 'C' dimension of 341mm select balance number 110.

#### Step B2 - Bottom Sash Balances

- 1. Measure the overall window opening height from sill to head. This is the Extended Dimension 'E'
- 2. Refer to appropriate Extended Dimensions 'E' on size chart and select the Balance Number matching the Extended 'E' Dimension.
- 3. If there is not an exact match to Extended 'E' Dimension go to the next larger Balance Number size. e.g. – For Extended 'E' dimension of 546mm select balance number 110.

#### Step C - Select Weight Range

The next step is to establish the weight of each sash. It is best to weight the sash to ensure an accurate sash weight. If an estimated sash weight is required, this can calculated using the glass weight per square meter of glass shown below, together with the sash area. For double glazed glass, double the glass thickness used for the calculation. An allowance may also need to be made for the weight of the sash frame material.

3 mm glass thickness weights – 7.5 Kg Per square metre 4 mm glass thickness weights – 10.0 Kg Per square metre 5 mm glass thickness weights – 12.5 Kg Per square metre 6 mm glass thickness weights – 15.0 Kg Per square metre Double glazed 6mm+6mm glass thickness weights – 30.0 Kg Per square metre

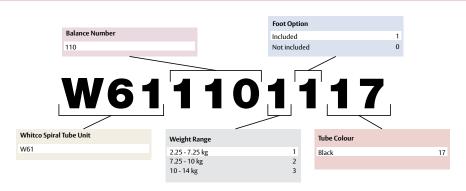
Select the correct weight range to match the sash weight, by using the weight ranges shown below. e.g. – For a sash weight of 5.25kg select weight range 1

#### Step D - Select Foot Option

Foot options: Standard foot attached 1 or no foot (to accept adjustable foot) 0 e.g. – For Standard foot attached select foot option 1.

#### Step E - Tube Colour

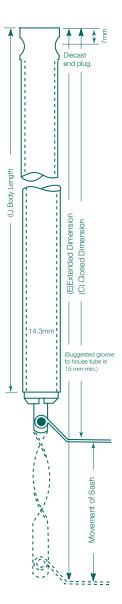
Tube finish is Black only – 17



#### Size Chart

This size chart and the spiral balance selection guide on the previous page have been colour coordinated for added convenience.

	Step B1	Step B2			Step C	
Balance Number	'C' Closed Dimension (For top balance use exact balance or go smaller)	<sup>(For bottom balance or go larger)</sup>	'L' Body Length	Weight Range 1 2.25-7.25 Kg	Weight Range 2 7.25-10 Kg	Weight Range 3 10-14 Kg
110	318	559	292	3		
200	343	610	318	3		
220	368	660	343	3		
240	394	711	368	3		
260	419	762	394	3		
280	445	813	419	3		
210	470	864	445	3		
300	495	914	470	3		
320	521	965	495	4		
340	546	1,016	521	4		
360	572	1,067	546	4		
380	597	1,118	572	4		
310	622	1,168	597	4		
400	648	1,219	622	4	5	6
420	673	1,270	648	4	5	6
440	699	1,321	673	4	5	6
460	724	1,372	699	5	5	6
480	749	1,422	724	5	5	6
410	775	1,473	749	5	5	6
500	800	1,524	775	(5)	5	6
520	826	1,575	800	T T	5	6
540	851	1,626	826		6	6
560	876	1,676	851		6	7
580	902	1,727	876		6	7
510	927	1,778	902		6	7
600	953	1,829	927		6	7
620	978	1,880	953		6	7
640	1,003	1,930	978		7	7
660	1,029	1,981	1,003		7	8
680	1,054	2,031	1,029		7	8
610	1,080	2,083	1,054		7	8
700	1,105	2,134	1,080		7	8
720	1,130	2,183	1,105		7	8
				Initial number of protension turns to		



Initial number of pre-tension turns to use during installation



**Pre-tension turns number** Numbers shown in the main table are the initial number of pre-tension turns to use during installation for that balance



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Australia 1300 LOCK UP (1300 562 587) whitco.com.au

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**ASSA ABLOY Australia Pty Ltd** 235 Huntingdale Road Oakleigh, Victoria, 3166 Australia

info.au@assaabloy.com assaabloy.com.au

#### ASSA ABLOY New Zealand Ltd 6 Armstrong Road Albany, North Shore City, 0632

New Zealand info.nz@assaabloy.com assaabloy.co.nz

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