



## What are Spiral Spring Sash Balances?

### What is a Spiral Spring Sash Balance?

Often just called springs or sash springs, balances are sold in pairs, and fitted vertically. A single balance is fitted to either side of your sash window frame and the pair work in conjunction to counterbalance the weight of your sash making it easy to raise, lower and, because the weight of the sash is balanced by the springs, the sash will stay stationary at any position. It is crucial to match the sash weight with the correct balance load rating to ensure the sashes operate properly. Getting this wrong can result in the sash flying upward or dropping downward. We see a lot of windows where there is sash 'creep' where the sash drops over time. This is usually a sign of incorrectly selected balances.

### How do balances work?

sash balances consist of a spring (or two springs in the case of Assisted lift balances) inside a plastic tube with a hole at the top end for fixing to the sash frame and a pin at the bottom end for attaching to your sash using a foot or bracket. Once fitted, The springs are tensioned using a key to counterbalance the weight of your sash. When you lower the sash, you extend the spring and when you raise the sash, you release the tension in the spring. Running through the middle of the spring is a spiral steel rod that is used to regulate the speed at which the sash can travel as you lift or lower it. The spirals vary along the length of the rod with closer spirals in the centre to allow for more speed and spirals that are further apart at either end to slow the travel. The rod projects from the bottom and is fixed to your sash using brackets often referred to as feet or sash fixing brackets.

### What Balances do you supply?

We supply two types of Spiral balance. Our Standard single spring balance and our premium Assisted lift twin spring balance. Both types of balance are sold in pairs and the **pair** of balances are rated to balance your sash weight. So for example, if your sash weighs 40lbs, We will sell you a 40lb pair of balances. A balance is fitted each side of the window and combined, they will balance the 40lb sash.

### What are Standard balances?

Standard balances are our most competitively priced balance. They contain a single spring which is used for both load-bearing and to tension the balance. They work well with lighter sashes where less force is required to start the sash moving. We are moving slowly over to our

new V2 Standard balance that incorporates some slight changes to the spring design for a quieter operation.

## What are Assisted lift balances?

Assisted lift spring balances contain 2 springs. An outer spring that is the main load-bearing spring and an inner spring that is used to tension the balance as in the example below.

- The outer spring can hold 20lbs
- The inner is adjusted and can hold 15lbs
- The combined balance will now hold 35lbs

Because of the two springs, Assisted lift balances are easier to operate than Standard balances, require less force to operate and are better at smoothing out the travel of your sash. For these reasons, we recommend choosing them over Standard balances.

## What's weight ranges do your Standard Spiral Spring Balances cover?

Our Standard D4 balances will balance sashes weighing between 19lbs and 29lbs. Our Standard D6 balances will balance sashes weighing between 30lbs and 39lbs.

## What's weight ranges do your Assisted lift Spring Balances cover?

Our Assisted Lift balances will balance sashes weighing between 10lb and 99lbs. We can custom make balances for heavier sashes, please call our sales team.

## How can I tell which balance I have by looking at it?

All of our balances should be printed on the tube with a reference code. This is usually in the following formats.

### Standard Balance codes D426, D635 etc.

D4 & D6 prefixes denote the load range of the balance. D4 is a balance that operates between 19lbs and 29lbs. D6 is a balance that operates between 30lbs and 39lbs

The last 2 numbers denote the tube length of the balance in inches.

Therefore D426 is a 19-29lb balance 26" long and D635 would be a 30-39lb balance 35" long.

Our V2 Standard balances have white bungs. But the code is printed clearly on the tube cover.

### Assisted lift balance codes AL1024, AL3045 etc.

AL balances have a coloured plastic bung in the lower end of the tube and also marking on the tube. The colour of the bung can be useful in working out the load rating as per the table below, however, the code should be printed on the tube cover. The last 2 numbers denote the tube length of the balance in inches. Therefore AL1024 would be a 10-19lb balance 24" long and AL3045 would be a 30-39lb balance 45" long.

AL Balance Load Rating	Colour of bung
AL10	Red
AL20	Red
AL30	Blue
AL40	Black
AL50	White
AL60	Yellow
AL70	Yellow
AL80	Yellow
AL90	Yellow

What size should I make the groove to accommodate your sash balances?

Please refer to the table below for the groove size we recommend you machine in your frame or sash.

Balance Load Rating	Groove Width and Depth
D4, D6 Balances	17mm x 17mm
AL10, AL20 & AL30	18mm x 18mm
AL40,AL50,AL60,AL70,AL80,AL90	22mm x 22mm

How do I fit and tension my balances?

Fitting and tensioning your balances is fully explained in our free PDF download here.

[Standard \(D4/D6\) Balance Fitting Instructions.pdf](#)

[Assisted Lift \(AL\) Balance Fitting Instructions.pdf](#)