



PRODUCT USER MANUAL

# BRC-450

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## TECHNICAL DATA

### Product Number

BRC-450-16

### Material

The balancer is made of glassfiber reinforced polyamide plastic.  
The cable is made of stainless steel.  
8mm galvanised steel suspension carbine hook

### Weight

4,3kg / 9,5lbs

### Cable length

Maximum 4,5m / 15ft.

### Lifting power

13-16kg / 29-35lbs

### Temperature rating

-10 to 60°C / 14 to 140°F

### Max working angle

30° from plumb/vertical line

### Maintenance

Normal use, no maintenance required.  
See below

## SAFETY INFORMATION

**Warning:** The balancer comprises a powerful spring. The cable must not be released without load as this may cause damage to the balancer. Parts or equipment which can cause personal injury if a cable or spring breaks, must not be used without special safety precautions.

## FUNCTION / AREA OF USE

The balancer is designed to lift and lower a load within 0-4,5m / 0-14,5' with a maximum angle of 30 degrees from plumb/vertical line. The balancer is equipped with a ratched locking function which holds the cable in extended position.

The locking function can easily be turned on or off depending on area of use.

The balancer is also prepared to install a micro switch for automatic start-stop of an electrical damper or a fan starter, the micro switch is activated when the balancer cable is pulled out, (load lowered).

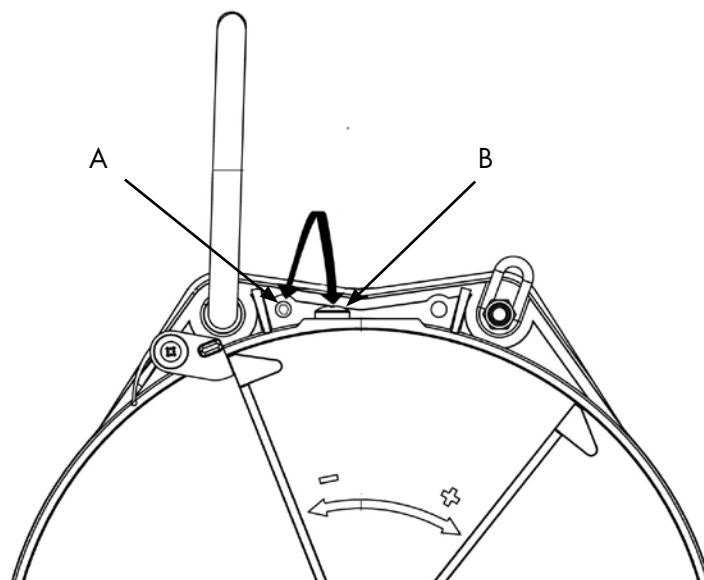
## RATCHET LOCKING DEVICE

The balancer is delivered with the ratchet lock de-activated.

To activate the locking device the plastic screw (A) positioned close to the suspension hook is moved to replace the metal screw (B) on the balancer housing.

Put the metal screw back where the plastic screw was positioned.

Pull out 0,5m / 2ft of cable and the locking device is activated.



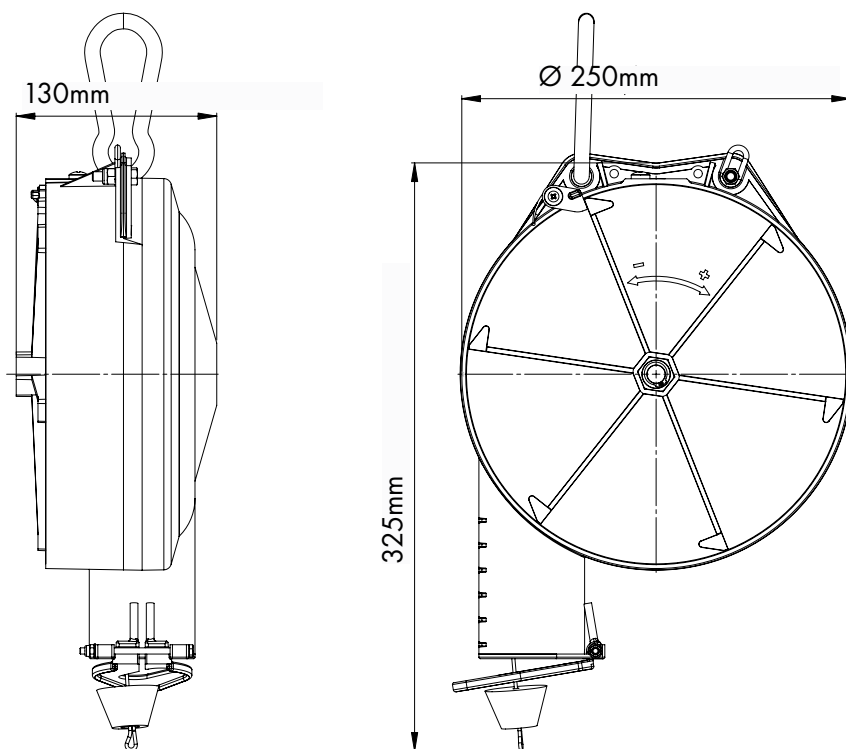
## INSTALLATION

Mounting point must withstand loads of 250 kg /550 lbs and permit movement in the angles the balancer is expected to operate.

If a screw and nut is applied for mounting, a locking nut must always be used.

In the event of dismantling, new locking nuts must be used when remounting.

The safety chain must be separately mounted and not incorporated in the fixing point of the balancer.



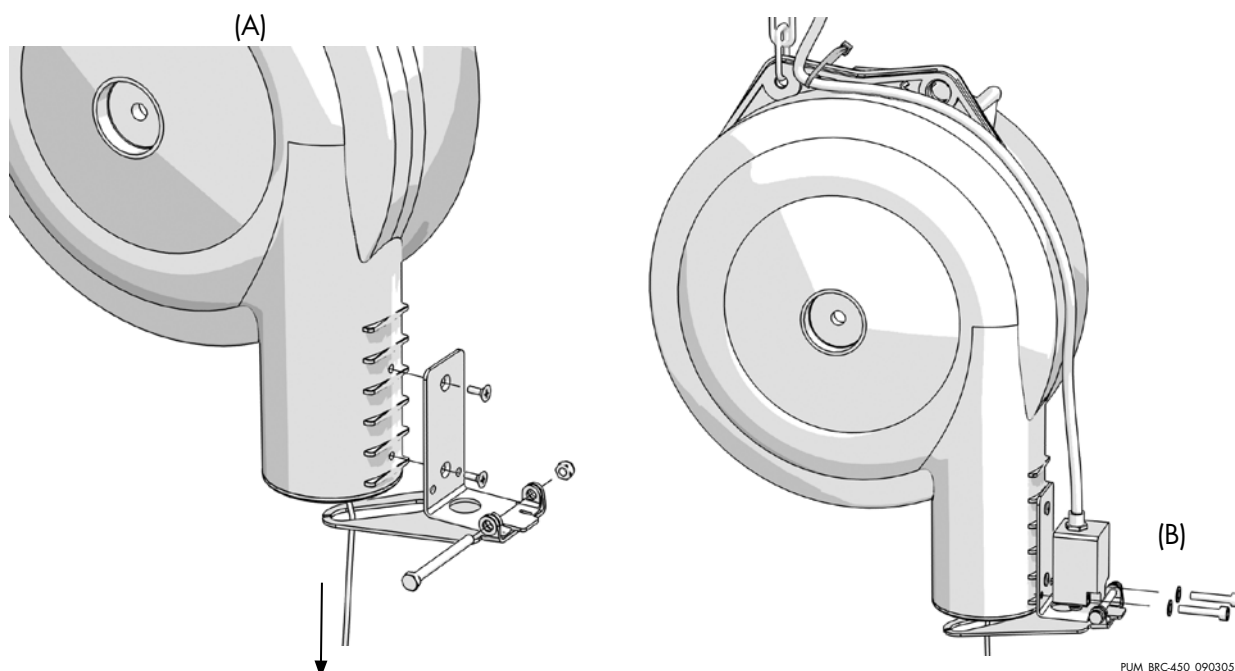
## INSTALLATION MICRO SWITCH

Fixate the balancer so that the cable can be pulled out slightly.

Mount the micro switch bracket and activator as the pictures shows (A).

Mount on the micro switch to the threaded holes with 2 screws (B).

Release the cable, the micro switch is now ready for electrical installation.



## MAINTENANCE

Check the balancer housing for cracks or loose screws twice (2) a year.  
The cable must also be checked twice (2) a year.  
If there is visible damage to the cable (e.g. broken threads), the balancer must be replaced.  
Plymovent has a replacement system for factory restored balancers.  
The lifting spring is designed for 15000 extensions.

### Adjustment of tension:

Normally the balancer should not be adjusted, but if necessary the balancer should be properly fixed.  
Use a 27mm wrench at the center.

Adjust the tension according to "+" and "-" on the balancer.

To decrease the tension the locking mechanism must be hold out while turning the center against minus, " - ".  
The balancer is delivered with 3 turns of pre-tension from zero position, (loose cable).

**Maximum pre-tension is 5 turns from zero position!**

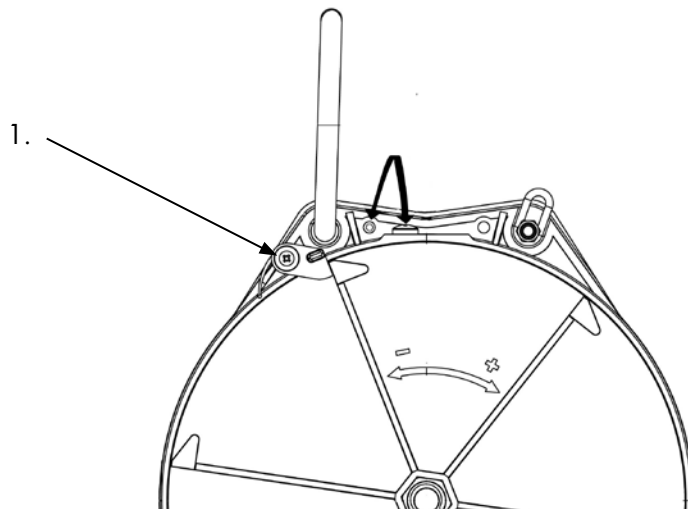
## ELECTRICAL INSTALLATION

The micro-switch BRC-MS contains a 2-pole electrical switch with two NC normally closed contacts to be used for control of an electrical damper or/and a fan starter.  
The switch is IP-65 and has a 6A 230VAC rating.

## SPARE PARTS

The balancer contains a strong spring and we do not recommend to open the balancer yourself.  
Plymovent has a replacement system for factory restored balancers.

1. Tension adjustment locking device Art.Nr. 90130-024



## DECLARATION OF CONFORMITY

We, Plymovent AB, hereby declare under sole responsibility that the product BRC-450 conforms to the following standards: EN 292-1, EN 292-2 according to the directive, 98/37/EG.

This declaration will cease to be valid if any modifications are made to the product without our express approval.

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05/10/2006