



Since 1886

## Pullman Industrial Balancer Reels

Tool Balancer / Product Balancer **SPECIFICATION SHEET**



### For Vertical Counterbalancing Applications

Tool Balancers  
Product Balancers  
Constant Tension Balancers  
Pull Down Lighting Fixtures  
Bulletin Boards  
Industrial Equipment

Handling Heavy Product during Assembly Operations  
Spring Balancers for Manufacturing Line  
Window Sash Balancers  
Retractors for Hospital Equipment  
Load Balancers for Safety Guards  
Cable Retractors for Kiosks

### Spring Balancer Specifications and General Information

**Weights from 4 LBS. To 35 LBS.** (Using Dead Weight Test)

Spring Forces (For cable balance reels only)

A minimum of 4-lbs. And a maximum of 35-lbs. (using dead weight test) is available within the same housing. A different high carbon clock spring is used for each increment of 2-3 lbs.

Multiple balances can be used for heavier weights.

#### **Cable Length up to 96"**

Characteristics for vertical counterbalancing (door, fume hood, tool balancing, etc.) where cable is preferable to steel tape, the cable may be as long as 96", but only the last approximately 30" is accurately counterbalanced for the spring force desired. Normally the less the spring force or weight involved the greater the distance beyond 30" is available at the end of the cable extension. The last 30" is accurately counterbalanced.

## Multiple Mounting Options for Spring Balancers

"A" Style – See page 3

"B" Style – See page 4

### Variable Load Counterbalancing

viz.: overhead doors, hinged panels and lids, the maximum spring force is only needed for a short distance when the object is initially started upward. As the load changes, the spring force lessens, for perfect balancing throughout the cable retraction.

NOTE: For many applications, our tape type clock spring counterbalances are a better solution to normal vertical balancing problems where infrequent cycling and holding the object to be counterbalanced at any position are the objectives.

**Spring Balancers are Built to last with Heavy Duty Cable and Metal Casing.**

### General Information

#### **Cable**

Either 1/16" or 3/32" diameter galvanized 7X7 performed aircraft cable tests well over 500 lbs.

**Note:** Length of cable affects spring force; therefore, specify exact length of cable as well as spring load required.

#### **Cable End Attachment**

Standard is thimble-eyelet (see drawing) type which revolves around a pin or bolt attached to an object to be moved. Other attachments can be made on request.

#### **Installation**

Bolt holes are conveniently located on the face of housing for a variety of installations.

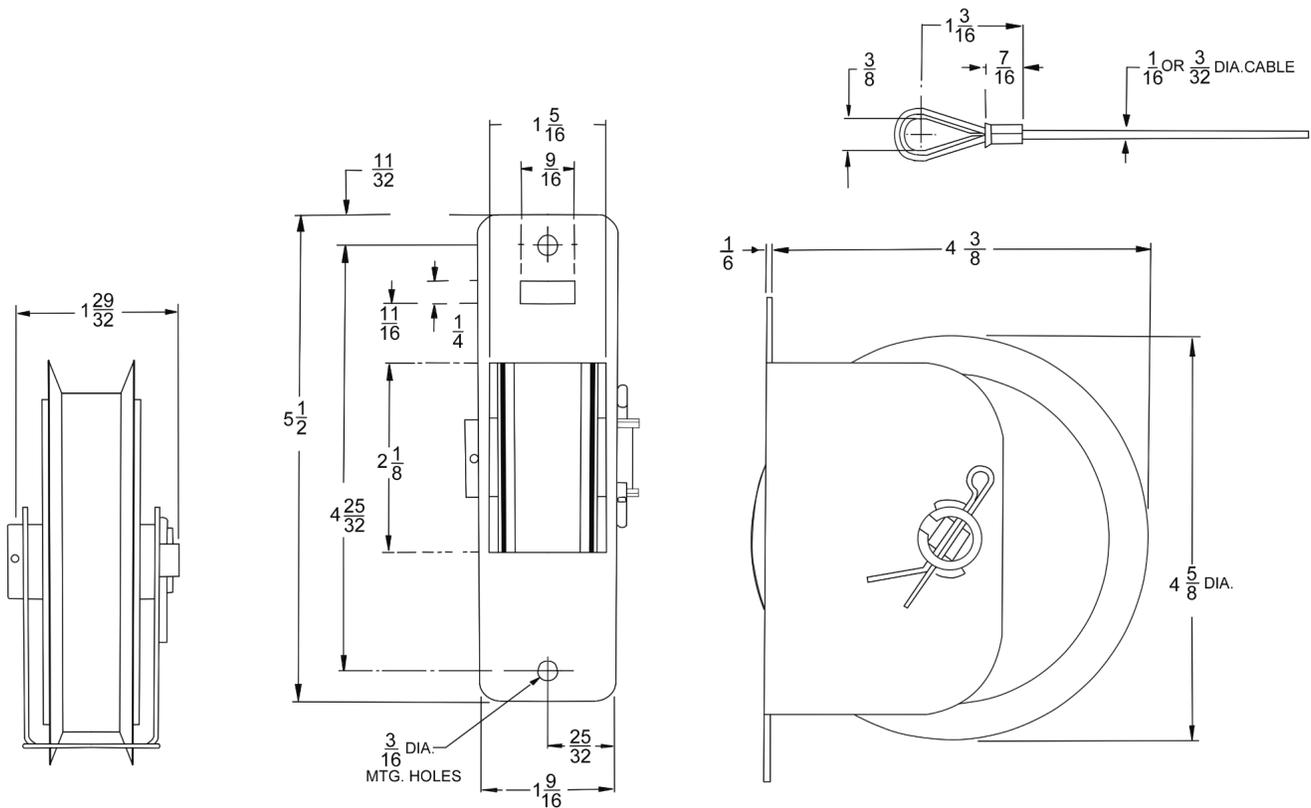
## Type "A" Balance Information (Part number CBA(# of lbs)-3000)



**THIF Cable Style  
(Through Hole in Face)**



**OB Cable Style  
(Off Back)**



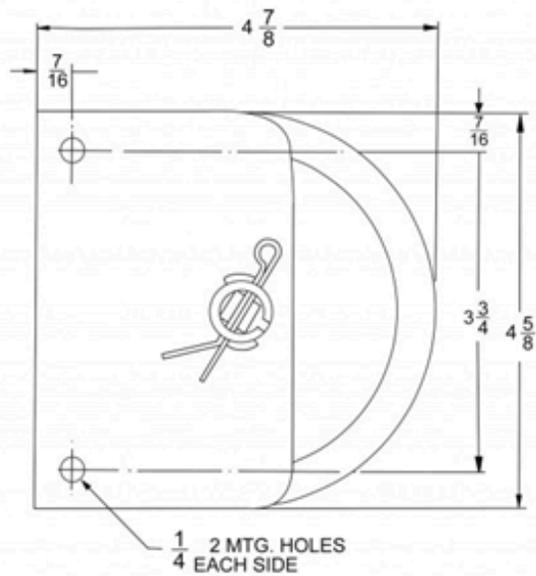
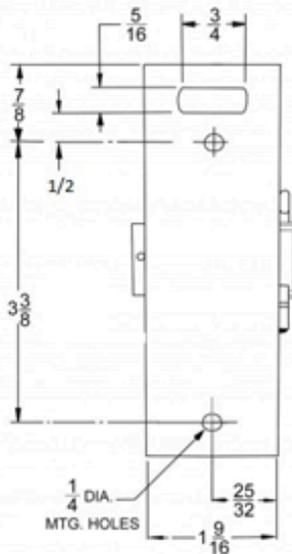
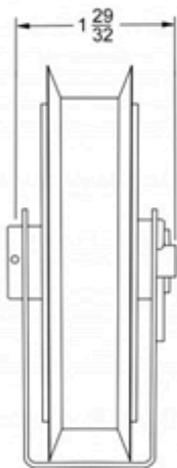
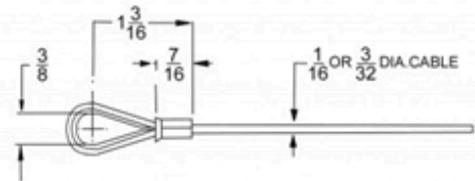
**Type "B" Balance Information (Part number CBB(# of lbs)-3000)**



**THIF Cable Style  
(Through Hole in Face)**



**OB Cable Style  
(Off Back)**



## Adjustment Of Spring Tension

**Final adjustment, if necessary, can be easily made in your shop or in the field. To adjust tension: (for cable balance reels only)**

- a. Use a "C" clamp on housing to hold tension.
- b. Insert any appropriate tool in the hole of the axle and hold.
- c. Remove the large cotter pin from the other end of the axle.
- d. Turn the axle clockwise for less tension. Turn the axle counter-clockwise (note more than 1/2 to 1 full turn) for more tension.
- e. Replace cotter pin.

**SEE EXAMPLE [VIDEO](#)**

**Our Custom Industrial Balance Department is prepared to adapt standard models or provide tooling for special models, to conform to your exact requirements.**