

## Application and Design

Model RBDR-50 is a round remote powered balancing damper designed to regulate the flow of air in a HVAC system. This balancing damper is ideal for applications where it is difficult to get access to manually adjust the dampers and balance the airflow. The 'EZ Balance' hand held remote (equipped with 9 volt power supply) operates the damper actuator when connected to the diffuser connector or wall/ceiling plate

## Ratings

- Pressure: 1 in. wg (.25 kPa) - pressure differential
- Velocity: 2000 fpm (10.2 m/s)
- Temperature: 180° F (82°C)

## Standard Construction:

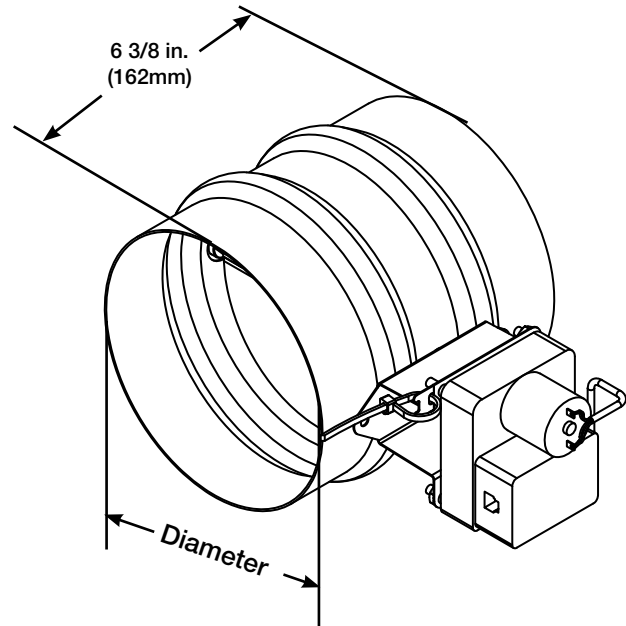
- Frame: Reinforced 20 ga. (1mm) galvanized steel
- Blade: 20 ga. (1mm) galvanized steel
- Axles: 3/8 in. sq. (10mm) plated steel
- Bearings: Synthetic (acetal) sleeve type
- Operator: 9 volt actuator

## Size Limitations

- Minimum size: 4 in. (101mm) dia.
- Maximum size: 24 in. (610mm) dia.

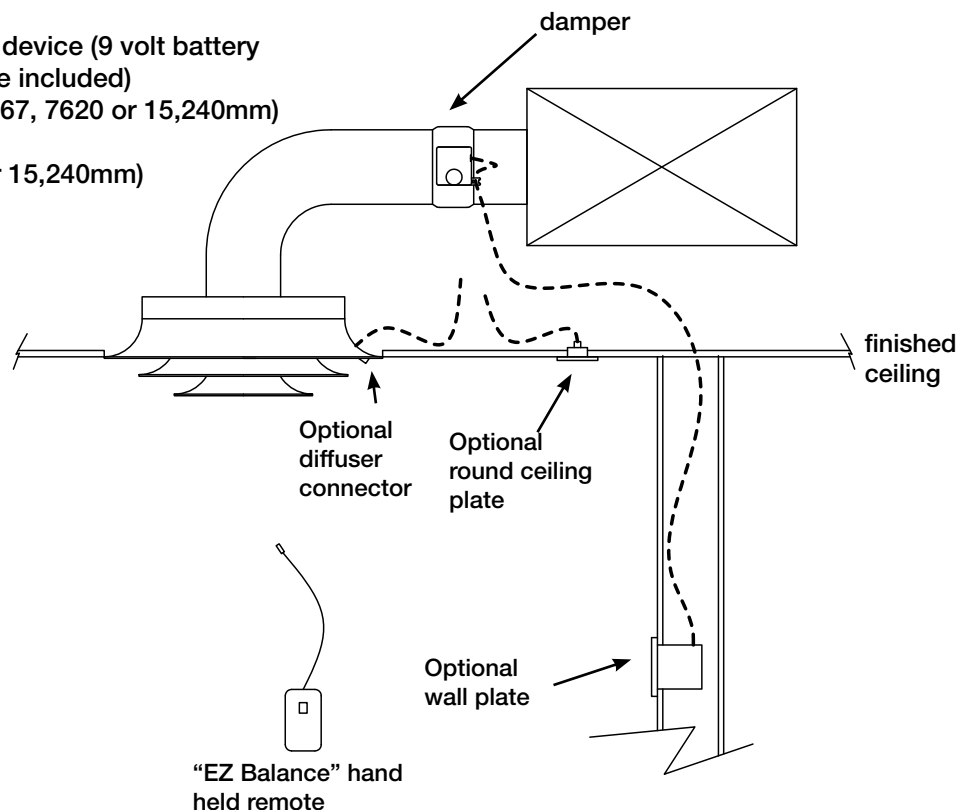
## Options:

- Diffuser connectors
- Single gang wall plates with ports (1, 2, 3, 4 or 6 port)
  - Colors: white, ivory, or stainless steel
- Round wall/ceiling mounting plate with one port
- Single gang outlet box
- 'EZ Balance' remote control device (9 volt battery and 5 foot (1524mm) of cable included)
- 5, 14, 25 or 50 foot (1524, 4267, 7620 or 15,240mm) non-plenum rated cable
- 14, 25 or 50 ft (4267, 7620 or 15,240mm) plenum rated cable
- Cable connectors



Diameter dimension is furnished approximately 1/8 in. (3mm) undersize.

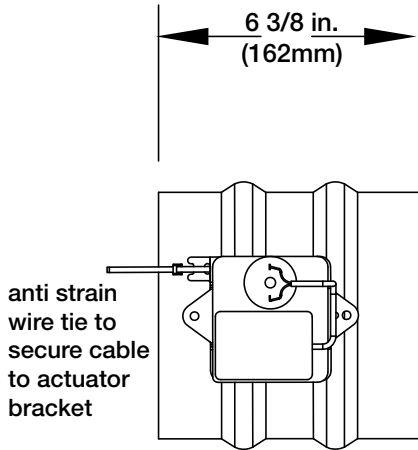
Note:  
All wire connections are made with prewired RJ11 plugs and sockets. No additional wiring or tools required.



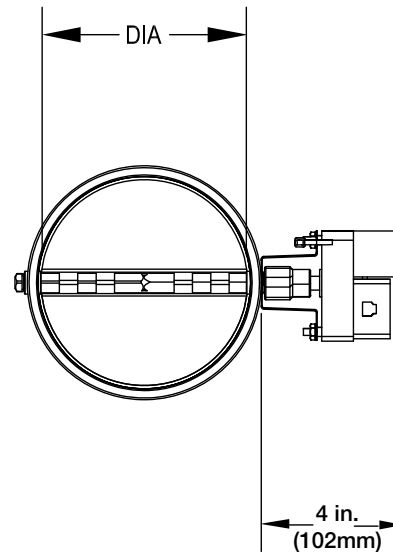
Note: Utilizing any controller other than 'EZ Balance' remote to adjust the RBD-10 damper voids the actuator warranty.

Installation instructions available at [www.greenheck.com](http://www.greenheck.com)

## Dimensional Drawings

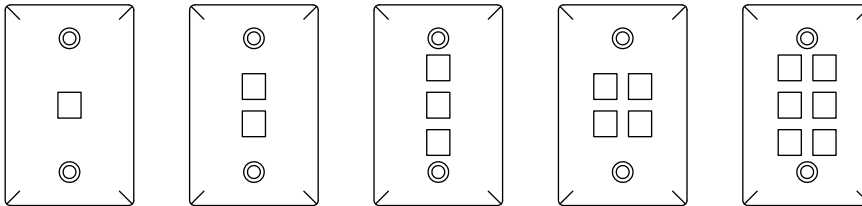


Side view  
Actuator factory mounted.



Front view  
Actuator factory mounted

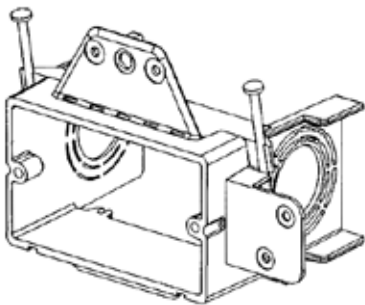
## Wall plates with ports



One Port      Two Ports      Three Ports      Four Ports      Six Ports

White, ivory and almond wall plate dimension is 3 1/4 in. x 4 3/4 in. (83mm x 121mm).  
Stainless steel wall plate dimension is 2 3/4 in. x 4 1/2 in. (70mm x 114mm).

## Single gang box



## Round wall/ceiling plate



3 1/4 in. (83mm) diameter

## EZ Balance remote



## Specifications

Round remote balancing dampers meeting the following specifications shall be furnished and installed where shown on plans and/or as described in schedules.

Dampers shall consist of: a 20 ga. (1mm) galvanized steel frame/sleeve with 6 3/8 in. (162mm) depth; blades fabricated from 20 ga. (1mm) galvanized steel; 3/8 in. (10mm) square plated steel axles, acetal bearings. Damper shall be supplied with 9 volt actuator. All

wire connections to be made using RJ11 plugs and sockets, no additional wiring or tools are needed.

Dampers shall be suitable for pressures up to 1 in. wg (.25 kPa), velocities up to 2000 fpm (10.2 m/s) and temperatures up to 180°F (82°C). Testing and ratings to be in accordance with AMCA Standard 500-D.

Basis of design is Greenheck's RBDR-50.



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