



air master

Chapter 18

INDEX

Non return dampers

1. Non return damper – Wall mounted.: ANRD - W.....18.1
 2. Non return damper – Duct mounted.: ANRD - D18.2
-
- Standard finishes.....18.3
 - Standard sizes.....18.3
 - Fixing details.....18.3
 - Performance data18.4
 - How to order18.4





air master

Non return damper

– Wall mounted

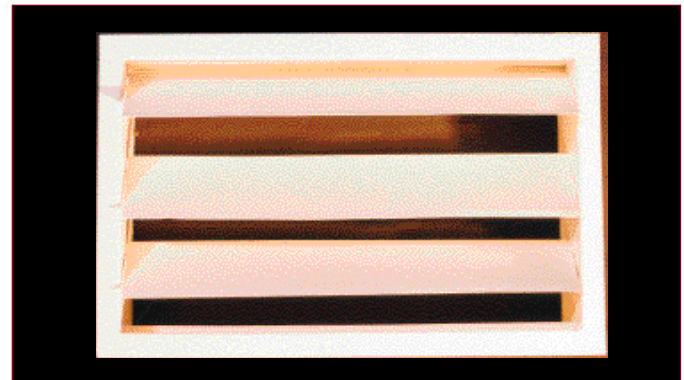
Model: ANRD-W

Construction:

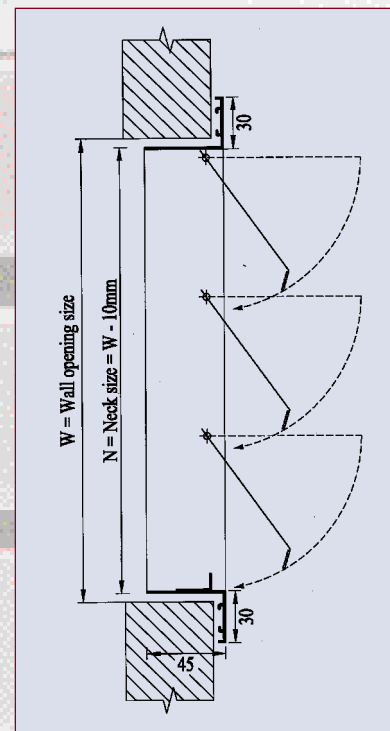
- **Frame:** High quality extruded aluminium profile with 30 mm flange width as standard. 12, 16, 24 mm flange widths are optional.
- **Blades:** Aluminium sheet as standard. GI sheet as option.
- **Blade supports:** Self oiling nylon bushings with 8 mm diameter aluminium rods.
- **Blade seals:** Foam gasket for air tightness.
- **Blade stoper:** 20 mm x 20 mm aluminium angle.

Description:

- Frame is of high quality extruded aluminium profiled construction with the advantages of corrosion resistance and rigidity.
- Air operated damper blades are fixed to the frame by self oiling nylon bushes with 8 mm dia aluminium pipes.
- Blades are sealed with foam gasket at the bottom to avoid rattling noise and to provide air tight operation.
- Blades open fully or to any angle depending on the air velocity. Blades stay in position of opening with out fluctuating when there is constant air flow. Blades closes quietly when the air flow stops.



- Designed to maintain a constant pressure level inside pressurized rooms by relieving excess air when it exceeds the desired limit.
- Generally installed on diesel generator, plant rooms ventilation system and exhaust ducting.
- Available in square and rectangular sizes.





air master

Non return damper

– Duct mounted

Model: ANRD-D

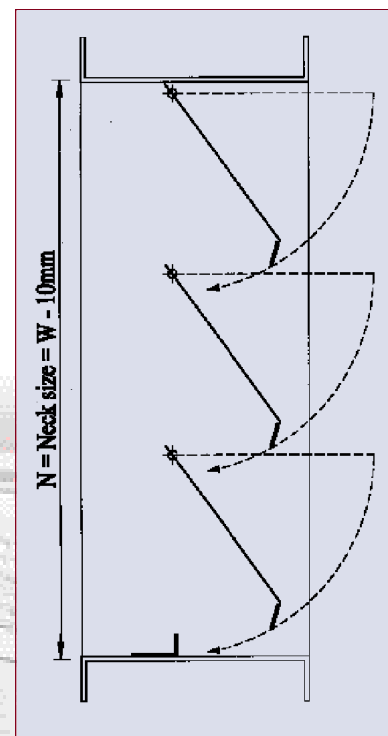
Construction:

- **Frame:** High quality galvanized steel sheet.
- **Frame size:** 125 mm depth and standard flange height of 25 mm.
- **Blades:** Aluminium sheet as standard. GI sheet as option.
- **Blade supports:** Self oiling nylon bushings with 8 mm diameter aluminium rods.
- **Blade seals:** 20 mm x 20 mm aluminium angle.

Description:

- Frame is constructed from galvanized steel sheet. Welded joints are protected by aluminium spray coating.
- Air operated damper blades are fixed to the frame by self oiling nylon bushes with 8 mm dia aluminium pipes.
- Blades are sealed with foam gasket at the bottom to avoid rattling noise and to provide air tight operation.
- Blades open fully or to any angle depending on the air velocity. Blades stay in position of opening with out fluctuating when there is constant air flow. Blades close quietly when the air flow stops.

- Designed to maintain a constant pressure level inside pressurized rooms. Used at duct outlets to prevent back draft when air moving devices are switched off.
- In a multi fan installation non return dampers prevent back draft through the operating fans.
- Structure is available with flanged edges and are supplied un drilled as standard.
- Available in square and rectangular sizes.





air master

Standard finishes:

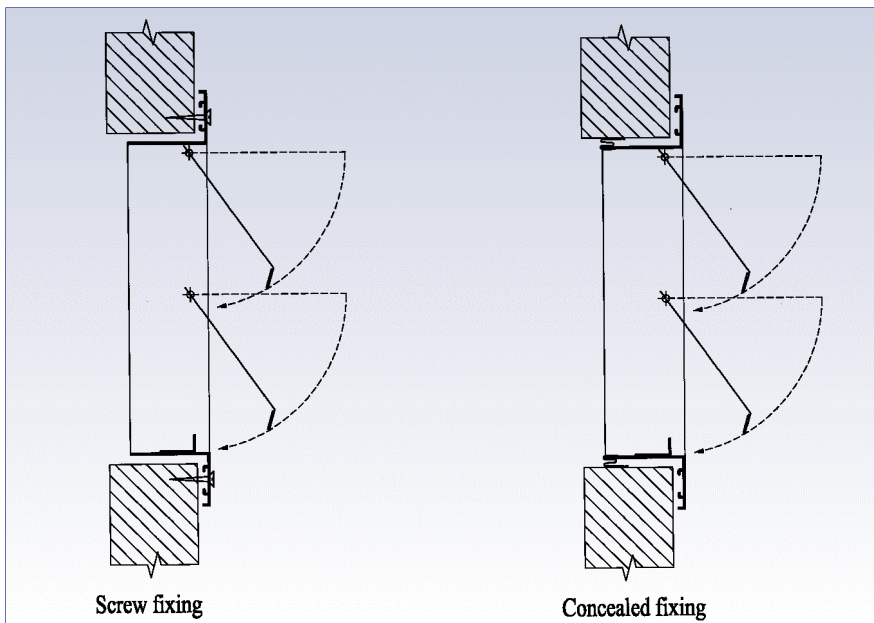
- Natural anodized aluminium finish.
- Powder coated colour finish as per RAL colour codes.
- Flexibility of finishing is available as option.

Standard sizes:

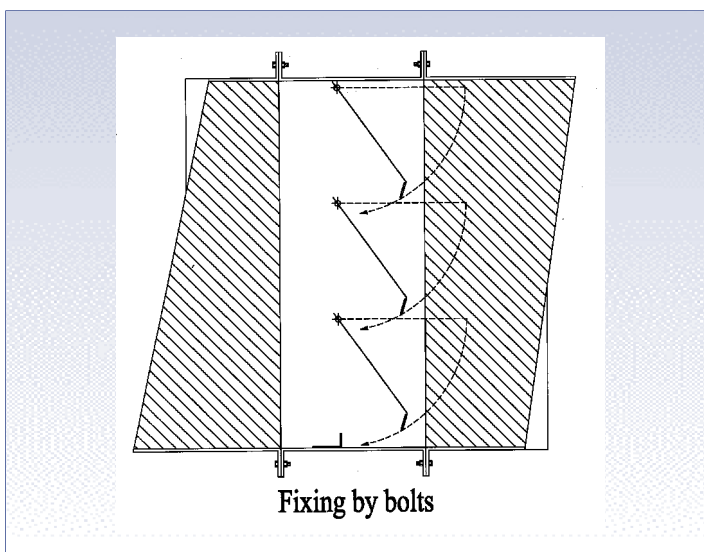
- Sizes available from 100 x 100 mm with an increment of 50 mm.
- Available in square and rectangular sizes.
- Non standard sizes available as option.

Fixing details:

Model: ANRD-W



Model: ANRD-D

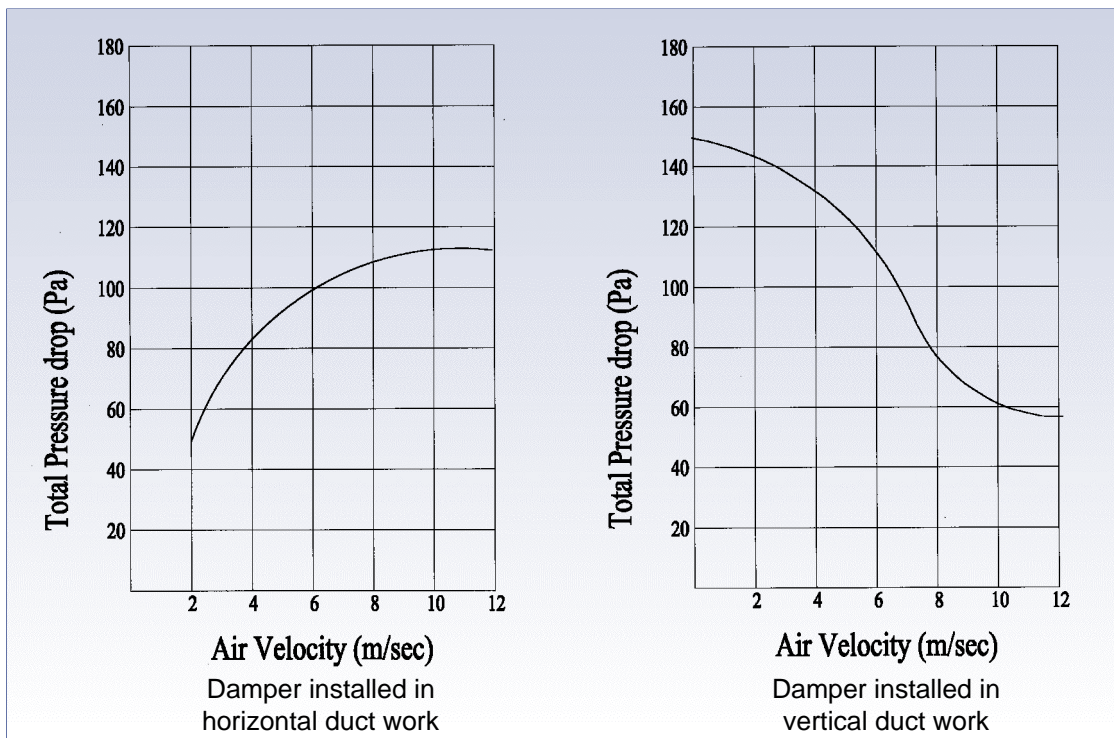




air master

Performance data:

1. Pressure drop Vs Air velocity:



How to order:

| Model | Mounting details | Size | Quantity | Fixing |
|-------|------------------|--|--------------------|-----------------------|
| ANRD | W= Wall mounted | Specify duct / wall opening size width x height in mm x mm | Specify in numbers | A = Fixing by bolts. |
| | D = Duct mounted | | | B = Screw fixing. |
| | | | | C = Concealed fixing. |

Ordering example:

1. To select non return dampers - duct mounded for a duct opening of 900 x 500 mm of quantity 50 nos. Fixing details: bolting.

Order as : ANRD-D-900 x 500 – 50 – A.

2. To select non return dampers - wall mounded for a wall opening of 500 x 400 mm of quantity 100 nos. Fixing details: Screw fixing.

Order as : ANRD-W-500 x 400 – 100-B.



Pressure relief damper

.....➔ Model: APRD-H-F,
APRD-H-D

Construction:

- **Frame:** Galvanized steel frame with powder coated finish.
- **Blades:** Galvanized steel blades with powder coated finish.
- **Blade supports:** Blade shafts are stainless steel and supported with brass bushes.
- **Blade seals:** Foam gasket for air tightness.

Description:

- The pressure relief dampers are provided with weighed metal strips.
- The dampers are tested after fabrication to operate at required pressure.
- The dampers are designed to maintain a constant pressure level inside pressurized rooms by relieving excess air when it exceeds the desired limit.

Standard Finishes:

Powder coated as per RAL color codes.

