

Volume Control D a m p e r s









Volume Control Damper NFC VD 2000 SERIES

NFC VD 2100 G-G-F VCD with `3V' GI Single Skin Blades

USAGE & APPLICATION

NAFFCO high quality Volume Control Dampers are designed for quiet, efficient and reliable air volume control in HVAC systems. These dampers allow even distribution and control of airflow under conditions of high duct pressures.



MODELS

- NFC VD 2100 G-G-F (Flange type, Single Skin Blade)
- NFC VD 2200 G-G-F (Flange type, Double Skin Blade).

STANDARD CONSTRUCTION

- FRAME: 1.2mm thick (18G) GI. Integral Flange for duct connections
 BLADE: 1.2mm thick (18G) GI, single skin blades `3V' form. or 1.5mm GI
 - double skin 'aerofoil' shape. Dampers up to 250mm height are single blade construction
- **BEARINGS:** Nylon/PVC bush is standard. Brass/Sintered Bronze oil impregnated bush optional
- AXLES: Square or Round. Spindles are either welded/riveted or bolted as per specification
- LINKAGE: 3x12mm zinc plated flat steel linkage. Opposed blades. Linkage external & concealed
- **QUADRANT:** GI manual lockable quadrant with "open", '1/2', '1/4' & "close" markings
- TIP SEAL: Rubber foam gasket at the blade tips to min. air leakage in "close" position
- SIZE: Single section min. size 150x150mm & max. 1200x1200mm
 FINISH: Mill finish
- **OPTIONAL:** Position indicators for 'open/close' indication are optional.

AVAILABLE OPTIONS

- NFC VD 2200 G-AL-F: same as above but blades are Extruded Double skin AL
- NFC VD 2100 G-S-F: same as above but blades are SS
- NFC VD 2100 S-S-F: same as above but Frame, blades, spindles are SS
- NFC MVD 2100 G-G-F: same as above with BELIMO/HONEYWELL actuator.

NFC VD 2200 G-AL-F VCD with AL 'Aerofoil' Blades



NFC MVD 2200 G-AL-F Multi-section Motorized VCD



Volume Control Damper NFC VD 2000 SERIES

MODELS

Motorized VCD with Actuator

- NFC VD 2100 G-G-SL (Sleeve type, Single Skin Blade)
- NFC VD 2200 G-G-SL (Sleeve type, Double Skin Blade).

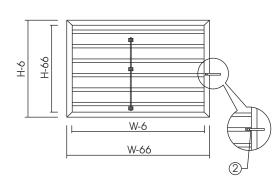
STANDARD CONSTRUCTION

- FRAME: 1.2mm thick (18G) GI. 'HAT' shape for duct connections
- BLADE: 1.2mm thick (18G) GI, single skin blades `3V' form. or 1.5mm GI double skin `aerofoil' shape
- BEARINGS: Nylon/PVC bush is standard. Brass/Sintered Bronze oil impregnated bush optional
- AXLES: Square or Round. Spindles are either welded/riveted or bolted as per specification
- LINKAGE: 3x12mm zinc plated flat steel linkage. Opposed blades opn. Linkage external concealed
- **QUADRANT:** GI manual lockable quadrant with "open", 1/2', 1/4' & "close" markings
- **TIP SEAL:** Rubber foam gasket at the blade tips to minimize air leakage in "close" position
- **SIZE:** Single section min. size 150x150mm & max. 1200x1200mm. Larger sizes as multiple sections
- **SLEEVE:** Suitable gauge of all around sleeve provided for motorized operation
- FINISH: Mill finish
- **OPTIONAL:** Position indicators for 'open/close' indication are optional.

AVAILABLE OPTIONS

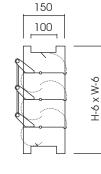
- NFC VD 2200 G-AL-SL: same as above but blades are Extruded Double skin AL
- NFC VD 2100 G-S-SL: same as above but blades are SS
- NFC VD 2100 S-S-SL: same as above but Frame, blades, spindles are SS
- NFC MVD 2100 G-G-SL: same as above with BELIMO/HONEYWELL actuator.

3) Linkage



1) GI Frame

2) GI Spindle



4) GI Blades

5) Stopper Strip

(4

6) Bush Bearing





NFC VD 2100 G-G-SL Opposed blade operation



VCD with Sleeve Type Frame

(1)





NFC VD 2200 G-G-P

Models

- NFC VD 2200 G-G-P
- NFC VD 2200 G-G-S&C.

Volume Control Damper NFC VD 2000 SERIES

Volume Control Dampers are designed for quiet, efficient and reliable air volume control in ventilation system.

NFC VD 2200 G-AL-S&C

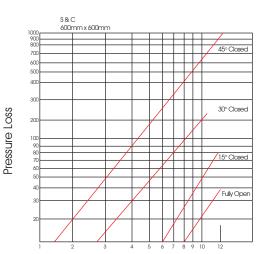


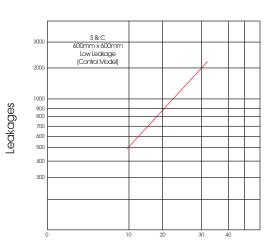
STANDARD CONSTRUCTION

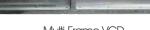
•	FRAME:	1.2mm thick (18G) GI. Frame shape is plain 'box' type or "Slip & Clip" joint to suit ductwork connections. Frame is a spot welded construction
•	BLADE:	1.2mm thick GI, single skin blades '3V' formed or 1.5mm double skin 'aerofoil' shape. Damper up to 250mm height is single blade construction
•	BEARINGS :	Nylon/PVC bush is standard. Brass/Sintered Bronze bush optional
•	AXLES:	Square/Round. Spindles are either weld/riveted/bolted as per specs.
•	LINKAGE:	3x12mm zinc plated flat steel linkage. Opposed blades open. Linkage external concealed
•	QUADRANT:	Manual lockable with "open", '1⁄2', '1⁄4' & "close" markings
•	TIP SEAL:	Rubber foam gasket at the blade tips to minimize air leakage in "close" position
•	SIZE: FINISH:	Single section min. size 150x150mm & max. 600x600mm Mill finish.

AVAILABLE OPTIONS

- OVCD-220 G-AL-SP: same as above but Blades are AL aerofoil shape
- OVCD-220 G-AL-SC: same as above but Blades are AL aerofoil shape.







Multi-Frame VCD



ROUND VCD NFC RVD 2100 SERIES

Volume Control Dampers are designed for quiet, efficient and reliable air volume control in ventilation system with Round Ducts.

USAGE & APPLICATION

 NFC RVD 2100 Circular Damper allows even distribution and control of airflow under conditions of high duct pressures. Dampers can be manual with a manual locking quadrant or motorized with awide range of electrical actuators.

MODELS

• NFC RVD 2100 G-G-R.

STANDARD CONSTRUCTION

NFC RVD 2100 G-G-R

Motorized Round VCD NFC MRVD 2100 G-G-R

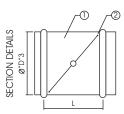
- CASING: GI casing 24G/22G for dia. up to 350mm & 22G/20G for higher dia. Round casing is manufactured by rolling suitable size GI sheet and spot welded at seam edges. Swagging at both ends to accommodate ductwork connections
- **BLADE:** GI steel single skin blades, 18G thick for sizes up to 500mm. 16G for sizes above 500mm diameter. Single skin blades are cut to round shape, reinforced at centre to accommodate spindle assembly and provide toughness
- **BEARINGS:** Brass/Nylon/PVC bush standard. Bronze bush optional
- AXLES: Blades are weld/riveted with Zinc plated axles. Square or round
- **QUADRANT:** GI manual lockable with "open", '1/2', '1/4' & "close" markings
- TIP SEAL: Rubber foam gasket at the blade round edge to minimize air leakage in "close" position
 FINISH: Mill finish
- SIZE: Min. 100mm, Max. 600mm diameter. Dampers up to 600mm are single blade construction
- **OPTIONAL:** Position indicators for 'open/close' indication are optional.

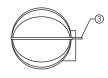
AVAILABLE OPTIONS

NFC MRVD 2100 G-G-R









1) Frame

3) Spindle

2) Blade





Non Return Damper Model: NFC NRD-2000

Pressure Relief Damper Model: NFC PRD-2000

USAGE & APPLICATION

- NAFFCO make Non Return Dampers (NFC NRD 2000 series) are designed for automatic shut off of individual sections of the air conditioning system. With the fan in running condition, the degree of blade opening is a function of air velocity. If the fan is turned off, the blade will close automatically. In a multi fan installation this prevents back draughts through non-operating fan
- NAFFCO make Pressure Relief Dampers, NFC PRD 2000 series models are also called Self Closing Dampers or Gravity Dampers or Pressure Relief Dampers. The blades are smooth, reliable and designed for energy saving. These are air operated, opening or closing dampers for intake, discharge and pressure relief vents in air conditioning systems. Also, designed to maintain a constant air pressure level inside pressurized rooms.

Models

- NFC NRD 2000 IW / NFC PRD 2000 IW: Internal wall mounted
- NFC NRC 2000 RD / NFC PRD 2000 RD: Round duct mounted
- NFC NRD 2000 SD / NFC PRD 2000 SD: Rectangular duct mounted
- NFC NRD 2000 EW / NFC PRD 2000 EW: External wall mounted.

STANDARD **C**ONSTRUCTION

•	CASING:	The casing is made from high quality AL/GI sheet steel of 18G thickness
•	BLADES:	Blades are made of 0.6mm to 1.0mm thickness AL/GI steel sheet.
		Parallel action blades
•	BUSHES:	Blades are fitted with nylon bushes for rattle free and smooth
		operation
•	GASKETS:	Blades are sealed with foam/rubber gasket at the bottom edge to
		prevent rattling noise and facilitate air tight operation
•	OPERATION:	Frame is fitted with AL/GI stopper to prevent the over movement of
		blades. Additional centre partition shall be provided if height or
		length is more than 900mm.



Non-Return Damper Wall Mounted



Non-Return Damper Wall Mounted

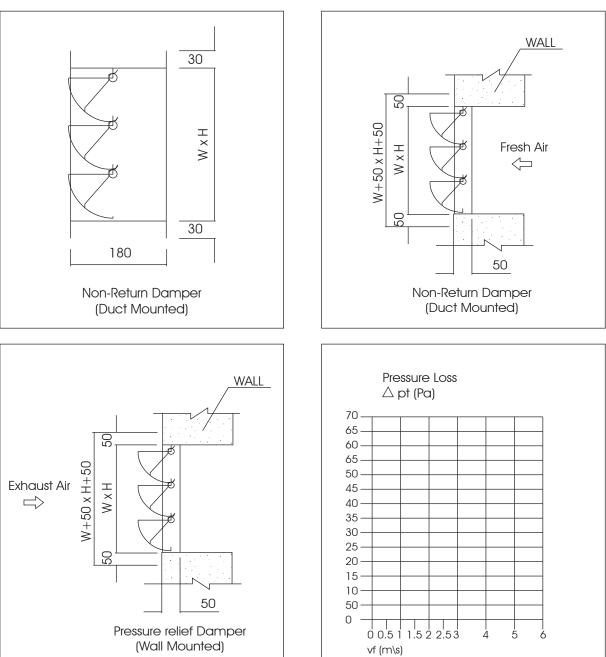


Non Return Damper Model: NFC NRD-2000

Pressure Relief Damper Model: NFC PRD-2000



Pressure Relief Damper Wall Mounted



DIMENSIONS (MM)