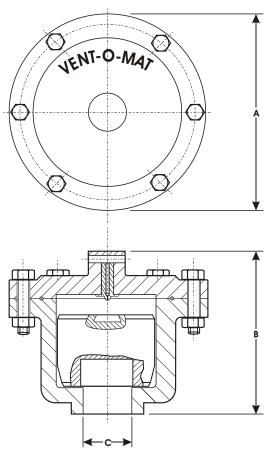
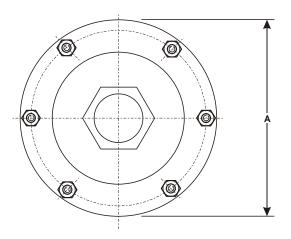
**VENT-O-MAT**<sup>®</sup>

## **Series RC**

## GENERAL SPECIFICATIONS SCREWED - DN25 (1")





Type:

Single Small Orifice Air Release Valve

**End Connection:** 

Screwed Female 1" BSP

**Nominal Size:** 

DN 25 (1")

Model No's: Pressure Rating - bar: RC 1610 PN 16

**Operating Pressure Range - bar:** 

Min Max. PN16 \_\_\_\_\_ 16

**Operating Temperature Range:** 

4°C to 80°C

Acceptable Media:

Potable or strained raw water.

**Function:** 

i) Pressurized air discharge - Pipeline operating.

**Standard Factory Tests:** 

- I) Hydrostatic 1.5 x max. rated working pressure
- ii) Low head leak 0.5 bar
- iii) Small orifice function at max. rated working pressure (minimum 1 valve in 10).

## **OVERALL DIMENSIONS & WEIGHTS**

DN	MODEL No.	PRESSURE RATING	Α	ВС		WEIGHT	
mm			mm	mm	mm	kg.	
25	025 RC 1610	PN16	120	106	25	3	

## **Series RC**

## SERIES RC - MODEL 025RC1610 SINGLE SMALL ORIFICE AIR RELEASE VALVE

(For the release of air in small volumes only, not suitable for vacuum service).

SIZE: PRESSURE RATING:

DN 25 (1") PN 16 (232 psi), ANSI # 125

OPERATING PRESSURE RANGE: END CONNECTION:

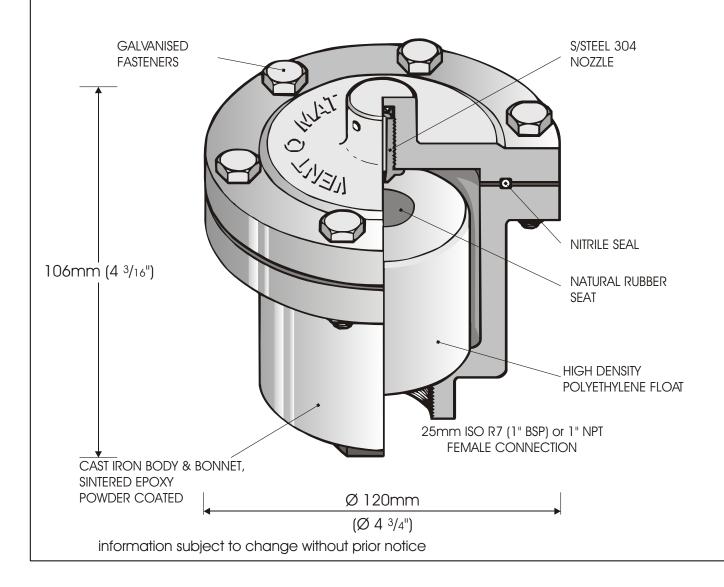
0,5 - 16 bar (7,2 - 232 psi) Screwed Female 1" BSP/NPT

TEMPERATURE RANGE: WEIGHT:

Water 4 - 80°C (40 - 180°F) 3kg. (6,6 lb)

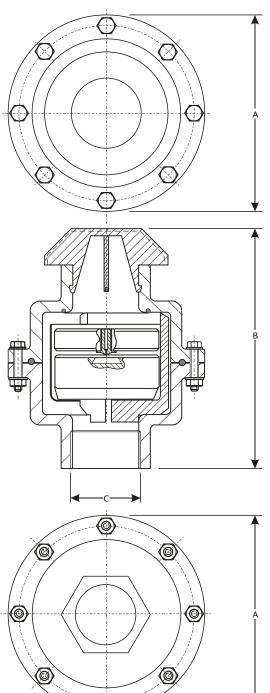
TEST PRESSURE: FUNCTION:

1.5 x Maximum Working Pressure Pressurized air discharge - Pipeline Operating



## **Series RC**

## GENERAL SPECIFICATIONS SCREWED - DN50 (2")



#### Type:

Double Orifice Air Release & Vacuum Break Valve

#### **End Connection:**

Screwed Female 2" BSP/NPT

#### **Nominal Size:**

DN 50 (2")

 Model No's:
 Pressure Ratings bar (psi):

 RC 2511 & 2521
 PN 25 (363 psi) ANSI #250

#### **Operating Pressure Range - bar (psi):**

Min Max. 0.5 (7.2) 25 (363)

#### **Operating Temperature Range:**

4 C (40 F) to 80 C (180 F)

PN25 (363 psi) ANSI #250

#### **Acceptable Media:**

Potable or strained raw water.

#### **Function:**

- i) Pressurized air discharge Pipeline operating.
- ii) High volume air discharge Pipeline Filling.
- iii) High volume air intake Pipeline Draining.

#### **Standard Factory Tests:**

- i) Hydrostatic 1.5 x max. rated working pressure
- ii) Low head leak 0.5 bar (7.2 psi)
- iii) Small orifice function at max. rated working pressure

(minimum 1 valve in 10).

## OVERALL DIMENSIONS & WEIGHTS

DN	MODEL No.	PRESSURE RATING	А		В		С		WEIGHT	
mm  in			mm	in	mm	in	mm	in	kg.	lbs
50 2	050 RC 2511 & 2521	PN25 (363 psi) ANSI #250	171	6 3/4	222	8 3/4	50	2	8	17.6

information subject to change without prior notice

## **Series RC**

# SERIES RC - MODELS 050 RC 2511 & 2521 DOUBLE ORIFICE AIR RELEASE & VACUUM BREAK VALVE

SIZE: PRESSURE RATING:

DN 50 (2") PN 25 (363 psi), ANSI # 250

OPERATING PRESSURE RANGE: END CONNECTION:

0,5 - 25 bar (7,2 - 363 psi)

Screwed Female 2" BSP/NPT

TEMPERATURE RANGE:

Water 4 - 80°C (40 - 180°F)

WEIGHT:
8kg. (17,6 lb)

**MAXIMUM DISCHARGE: (Large Orifice)** 

103,8 l/sec. (220 scf/min)

**TEST PRESSURE** 

MAXIMUM INTAKE: (Vacuum) 1.5 x Maximum Working Pressure

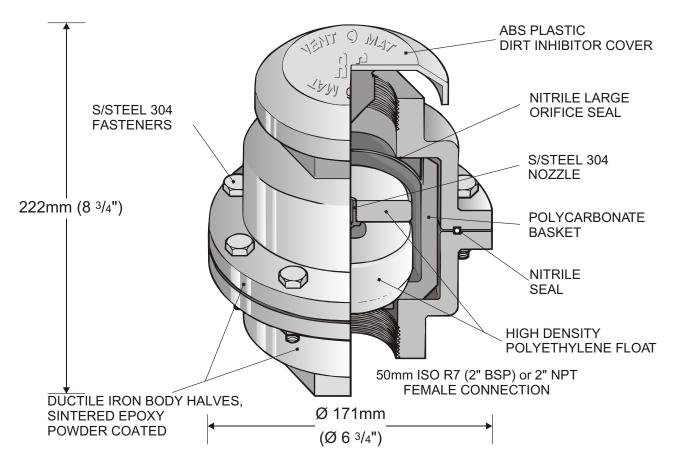
130 l/sec. (275,5 scf/min) at -0.35 bar (-5,1 psi) Dp pipe pressure.

#### **FUNCTION:**

(i) High volume air discharge - Pipeline Filling

(ii) High volume air intake - Pipeline Draining

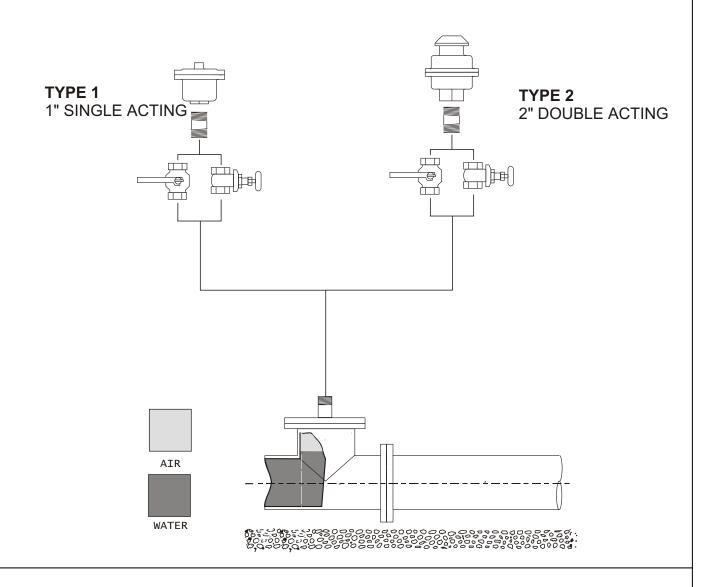
(iii) Pressurized air discharge - Pipeline Operating



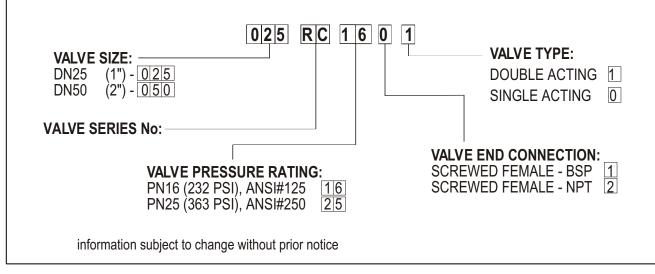
information subject to change without prior notice

## **Series RC**

## RECOMMENDED INSTALLATION ARRANGEMENTS



## **ORDERING GUIDE**

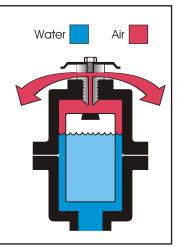


## **Series RC**

#### **OPERATION: SINGLE SMALL ORIFICE AIR RELEASE VALVE**

#### **VENTING UNDER PRESSURE**

Liquid enters the valve chamber raising the float upward to close the small orifice. Disentrained air rises through the liquid and accumulates in the top of the valve chamber. When the volume of air is sufficient the float is no longer buoyant and gravitates downwards thereby opening the small orifice and allowing accumulated air to be discharged to atmosphere. As the air is discharged the liquid raises the float to re-seal the small orifice and prevent escape of liquid.



#### **OPERATION: DOUBLE ORIFICE AIR RELEASE & VACUUM BREAK VALVE**



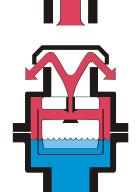
#### HIGH VOLUME AIR DISCHARGE (FILLING OF A PIPELINE)

Air enters the valve and flows through the annular area around the kinetic shield



#### PRESSURIZED AIR DISCHARGE (PIPELINE OPERATING)

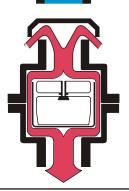
Subsequent to the filling of a pipeline, liquid enters the valve chamber and the floats are buoyed so that the upper float closes the large orifice, the valve will then become internally pressurized. Disentrained air rises through the liquid and accumulates in the valve chamber, when the volume of air is sufficient to displace the liquid, the lower float is no longer buoyant and gravitates downwards thereby opening the small orifice and allowing accumulated air to





#### HIGH VOLUME AIR INTAKE (PIPELINE DRAINING)

Simultaneous drainage of liquid from the valve chamber and the loss of pressure causes both floats to gravitate downwards thereby opening the large orifice and allowing atmospheric air through the valve to replace draining liquid in the



DN 15 Air Release Valves available on request.
DN 15 & DN 25 Vacuum Breaker Valves available on request.

information subject to change without prior notice



#### Series RC

#### Complete the form below for any additional information and fax/post to:

Vent-O-Mat P. O. Box 5064

**Benoni South** 1502 **South Africa** Tel: (+27 11) 748 0200 Fax: (+27 11) 421 2749 E Mail: dfc@dfc.co.za Web Site: www.ventomat.com Company Name: \_\_\_\_\_ Postal Address: ..... Postal Code: \_\_\_\_\_ Country: \_\_\_\_\_ Tel: \_\_\_\_\_\_ Fax: \_\_\_\_\_\_ Fax: \_\_\_\_\_\_ Contact Name: \_\_\_\_\_ Title: **Comments:** Products you are interested in: **VENT-O-MAT® Series RBXc Air Release & Vacuum Break Valves** compact single chamber design with integral "Anti-Shock" surge dampening mechanism in an economical cast ductile iron construction. **VENT-O-MAT® Series RBX Air Release & Vacuum Break Valves** compact single chamber design with integral "Anti-Shock" surge dampening mechanism. **VENT-O-MAT®** Series RGX Sewage Air Release & Vacuum Break Valves compact single chamber design with integral "Anti-Surge" surge dampening mechanism. **VENT-O-MAT®** Series RX Air Release & Vacuum Break Valves compact single chamber design pump protector. LevelDex® High Performance Endline Level Control Valves end line valve with cushioned closing characteristics for level control in tanks and reservoirs.