

# Continuous Air Release / Vacuum Relief Valves (Metal & Plastic)

Continuous air release valves are designed to provide efficient air releasing and intake for water pipelines when the system is started or shut off along with residual air removal generated during the working. Available in both metal (aluminum) and plastic (reinforced plastics), these valves are durable, weather-resistant, and corrosion-resistant, making them ideal for a wide range of agriculture irrigation and industrial applications.



## HIGHLIGHTS

- **Lightweight Construction:** High-strength aluminum (metal) or durable, weather-resistant reinforced plastic valves ensure easy installation and long-lasting durability.
- **Efficient Air Expulsion and Intake:** Large volume air release/intake capability during pipe filling and pump shut off.
- **Low Pressure Sealing**
- **Debris Protection:** Venting passage equipped with screen to prevent debris intrusion and blockages.
- **Versatile and Secure Fittings:** The plastic version includes a threaded elbow outlet for flexible installation.



## APPLICATIONS

### Kinetic Air Expulsion:

When the pipeline is being filled, the air release valve remains open, expelling surplus air outside the system. Once the pipe is filled with water, the valve closes tightly, ensuring a secure and leak-free seal.

### Kinetic Air Admission:

During negative pressure or vacuum conditions within the pipe, the air release valve opens to allow air inside, preventing damage to pipes and accessories by avoiding vacuum-induced stress.

### Residual Air Expulsion (Automatic Air):

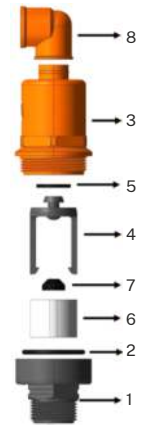
The air release valve constantly purges residual air generated in the system, even under pressurized conditions. This prevents air pockets from forming, which could affect system performance.

## Technical Data (Plastic CARV)

| Model No                 |     | 87CPM/88CPM             | 88CPDX     | 90CP       |
|--------------------------|-----|-------------------------|------------|------------|
| Connection Size          |     | ¾"/1" (20/25 mm)        | 1" (25 mm) | 2" (50 mm) |
| Connection Type          |     | Male Threaded (BSP/NPT) |            |            |
| Maximum Working Pressure | BAR | 16                      |            |            |
|                          | PSI | 232                     |            |            |
| Sealing Pressure         | BAR | 0.5                     | 0.1        | 0.3        |
|                          | PSI | 7                       | 2          | 5          |

## Material Specifications

| Part No | Description         | Model No    |          |          |
|---------|---------------------|-------------|----------|----------|
|         |                     | 87CPM/88CPM | 88CPDX   | 90CP     |
| 1       | Bottom              | PAGF        | PAGF     | PAGF     |
| 2       | Bottom O-ring       | EPDM/NBR    | EPDM/NBR | EPDM/NBR |
| 3       | Body                | PAGF        | PAGF     | PAGF     |
| 4       | Float Guide         | PPGF        | PPGF     | PPGF     |
| 5       | Primary Seal washer | EPDM        | EPDM     | EPDM     |
| 6       | Float               | EX-PP       | EX-GPPS  | EX-PP    |
| 7       | Secondary Seal      | EPDM        | EPDM     | EPDM     |
| 8       | Elbow               | PAGF        | PAGF     | PAGF     |
| 9       | Float Guide Stopper | PPGF        | -        | -        |

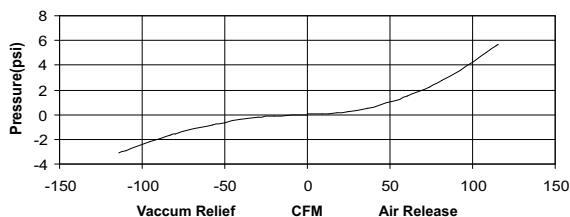


## Product Dimensions

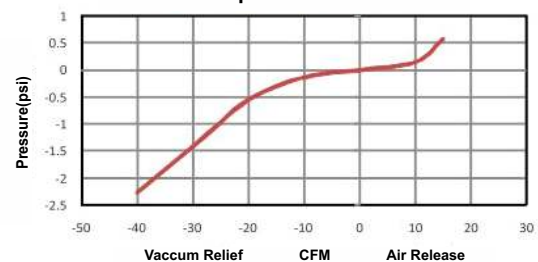
| Part No  | Clear Opening Diameter |         | Height |          | Width |         | Weight |       |
|----------|------------------------|---------|--------|----------|-------|---------|--------|-------|
|          | CM                     | INCH    | CM     | INCH     | CM    | INCH    | KG     | LBS   |
| 87/88CPM | 1.7                    | 43/64   | 14.5   | 5 45/64  | 5.4   | 2 1/8   | 0.12   | 0.264 |
| 88CPDX   | 2.1                    | 53/64   | 20     | 7 7/8    | 9.3   | 3 21/32 | 0.31   | 0.683 |
| 90P      | 3.4                    | 1 11/32 | 26.9   | 10 19/32 | 10.1  | 3 31/32 | 0.684  | 1.51  |



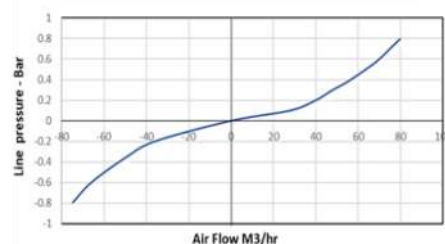
Performance Graph: Model - 90CP



Performance Graph: Model - 87CPM & 88CPM



Performance Graph: Model - 88CPDX



## Technical Data (Metal CARV)

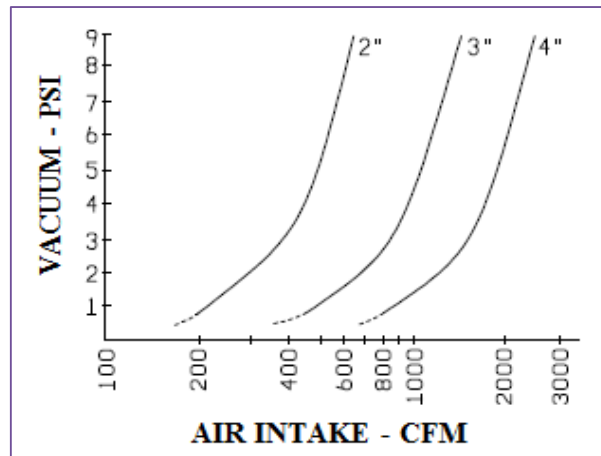
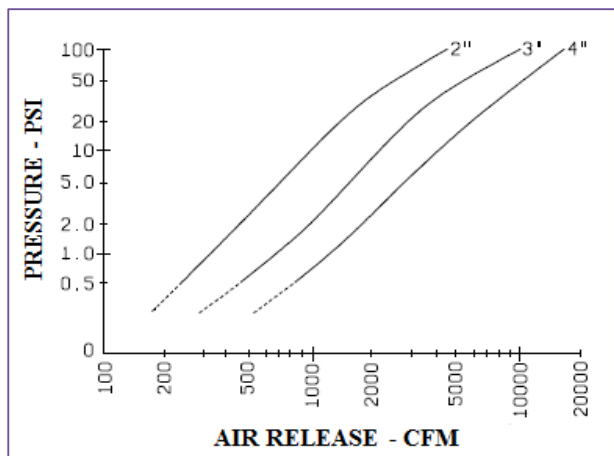
| Model No                  |      | HT-90C                    | HT-91C      | HT-92C       |
|---------------------------|------|---------------------------|-------------|--------------|
| Inlet Connection          |      | 2" / (50mm)               | 3" / (80mm) | 4" / (100mm) |
| Maximum Working Pressure  | BAR  | 0.5-10                    | 0.5-7       |              |
|                           | PSI  | 7-150                     | 7-100       |              |
| Connection                | Type | Female Threaded (BSP/NPT) |             |              |
| Sealing Pressure          | BAR  | 0.5                       |             |              |
|                           | PSI  | 7                         |             |              |
| Material of Constructions |      | Aluminium                 |             |              |

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| Part No | Description         | Model No    |          |          |
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|         |                     | 87CPM/88CPM | 88CPDX   | 90CP     |
| 1       | Bottom              | PAGF        | PAGF     | PAGF     |
| 2       | Bottom O-ring       | EPDM/NBR    | EPDM/NBR | EPDM/NBR |
| 3       | Body                | PAGF        | PAGF     | PAGF     |
| 4       | Float Guide         | PPGF        | PPGF     | PPGF     |
| 5       | Primary Seal washer | EPDM        | EPDM     | EPDM     |
| 6       | Float               | EX-PP       | EX-GPPS  | EX-PP    |
| 7       | Secondary Seal      | EPDM        | EPDM     | EPDM     |
| 8       | Elbow               | PAGF        | PAGF     | PAGF     |
| 9       | Float Guide Stopper | PPGF        | -        | -        |

## Product Dimensions

| Part No | Clear Opening Diameter |                                | Height |                                  | Width |                                 | Weight |       |
|---------|------------------------|--------------------------------|--------|----------------------------------|-------|---------------------------------|--------|-------|
|         | CM                     | INCH                           | CM     | INCH                             | CM    | INCH                            | KG     | LBS   |
| HT-90C  | 5.1                    | 2 <sup>1</sup> / <sub>64</sub> | 26.6   | 10 <sup>15</sup> / <sub>32</sub> | 13.5  | 5 <sup>5</sup> / <sub>16</sub>  | 2.64   | 5.82  |
| HT-91C  | 7.7                    | 3 <sup>1</sup> / <sub>32</sub> | 28.6   | 11 <sup>17</sup> / <sub>64</sub> | 17.6  | 6 <sup>59</sup> / <sub>64</sub> | 4.64   | 10.23 |
| HT-92C  | 7.7                    | 3 <sup>1</sup> / <sub>32</sub> | 29.8   | 11 <sup>47</sup> / <sub>64</sub> | 17.6  | 6 <sup>59</sup> / <sub>64</sub> | 5      | 11.02 |



1 CFM = 1.699 m<sup>3</sup>/hr  
1 PSI = 0.703mwc