

# S-020 HC PN 16



# S-022 HC PN 25

# S-024 HC PN 40

## High Capacity Automatic Air Release Valve

### Application

Wastewater

### Description

The S-020, 022, 024 HC are high capacity automatic air release valves installed on pressurized wastewater transmission systems to release accumulated air, improving pipeline hydraulic efficiency by reducing head losses and improving flow. A continuous air gap in the valve body separates the wastewater from the sealing mechanism.

### Operation



Automatic  
Air Release



### Installation

- Pump stations for sewage, wastewater & water treatment plants
- Wastewater and effluent water transmission lines

### Features and Benefits

Conical body shape & unique design	•	maximum air gap/ minimum body length
Continuous air gap	•	separates the liquid from the sealing mechanism
Float assembly and sealing mechanism linkage	•	free movement, turbulence will not unseal the sealing mechanism
Large orifice area	•	high capacity air release
Funnel-shaped lower body	•	residue matter falls back into the system pipeline
Rolling Seal	•	leak-free sealing over wide range of pressure differentials
One-size orifice	•	covers a wide pressure range (up to 40 bar)
All internal parts - stainless steel 316, polymer, rubber materials	•	non-corrosive and durable
Ball valve	•	releases pressure and drains valve prior to maintenance

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### *Technical Specifications*



Size Range: 2" - 4"



Working pressure range: S-020: 0.05 - 16 bar, S-022: 0.05 - 25 bar, S-024: 0.05 - 40 bar  
Testing pressure: 1.5 times maximum working pressure



Maximum working temperature: 60° C.  
Maximum intermittent temperature: 90° C



Valve coating: Fusion bonded epoxy coating in compliance with standard DIN 30677-2

Upon ordering, please specify: model, size, working pressure, thread/ flange standard and type of liquid

### *Valve Selection Options*

- 2" valve connections: threaded BSP /NPT or flanged
- Flanged ends to meet any requested standard
- Welded/ casted bodies: steel or stainless steel
- Valve coating: Fusion bonded epoxy coating in compliance with standard DIN 30677-2
- Other coatings are available upon request

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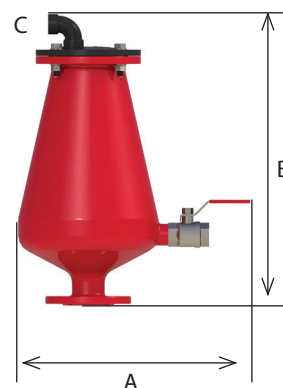
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## Dimensions and Weight

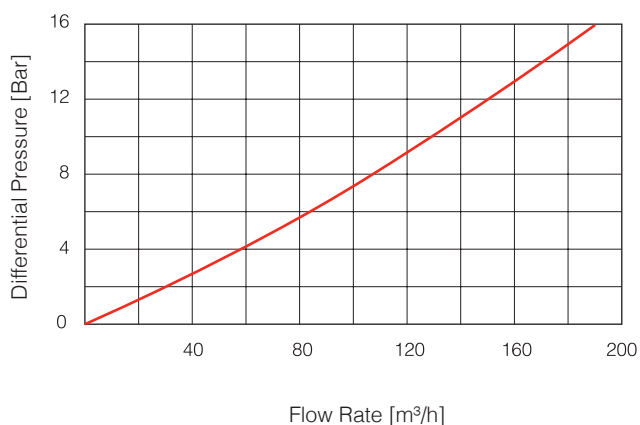
Size	Dimensions (mm)		Connection	Weight (kg)	Orifice Area (mm <sup>2</sup> )
	A	B			
2" (50 mm) THR	271	603	1"	16	40
2" (50 mm) FL	271	603	1"	16.5	40
3" (80 mm) THR	271	603	1"	16.7	40
3" (80 mm) FL	271	603	1"	16.7	40
4" (100 mm) FL	271	603	1"	17.2	40

\* All product weights are approximate due to the differences in flange standards and variable accessories

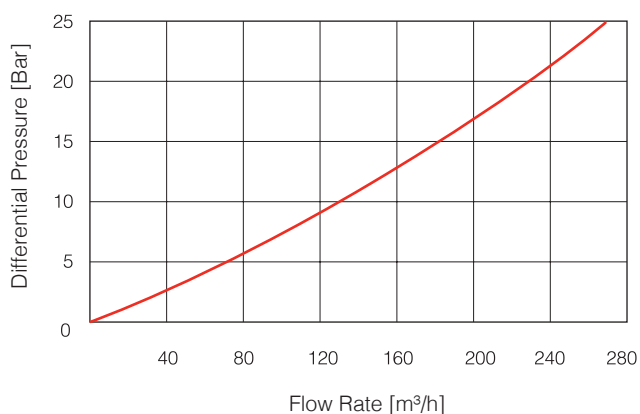


## Flow Charts

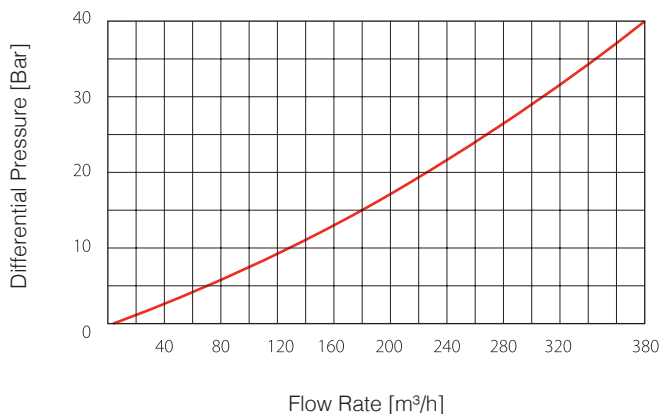
PN 16 AUTOMATIC AIR RELEASE FLOW RATE



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## Parts List and Specification

Part	Material
1. Cover Assembly	
1a. Air Release Elbow	Polypropylene
1b. Cover	Reinforced Nylon / Steel Din St.37
2. Seal Assembly	
2a. Air Release Orifice	Reinforced Nylon
2b. Lever	Reinforced Nylon
2c. Rolling Seal	EPDM
3. Float Assembly	
3a. Nut & Washer	Stainless Steel 316
3b. Spring	Stainless Steel 316
3c. Float & Rod	Polypropylene / Stainless Steel 316 & Stainless Steel 316
4. Body Assembly	
4a. O-Ring	BUNA-N
4b. Body	Cast Steel
4c. Ball Valve	Brass, Chrome Coated / Stainless Steel 316

