

# RVS SERIES ROTARY AIRLOCK VALVE



## SQUARE FLANGE, DROP-THRU VALVE

The RVS Series Standard Rotary Airlock Valve is ideal for the pneumatic conveying of dry, free flowing, non-cohesive bulk density products or powders. This square flange, drop-thru valve feeds material through the six rotating vanes where it drops out the bottom outlet flange via gravity. This outboard bearing airlock (valve) achieves high fill efficiencies with minimum air leakage, due to precise machining and tight rotor clearances. The RVS Series Standard Rotary Airlock Valve is available in a 12" size.

### TYPICAL BULK MATERIALS PROCESSED

- Powder
- Activated Carbon (PAC)
- Plastic Pellets
- Magnesium Oxide
- Soda Ash
- Fly Ash
- Rice
- Lime
- Cement
- Peanuts
- Others

### TYPICAL APPLICATIONS

- Water Treatment
- Food
- Chemical Processing
- Mining
- Grain Handling
- General Industrial
- Oil and Gas
- Glass and Ceramics
- Pulp and Paper

### FEATURES

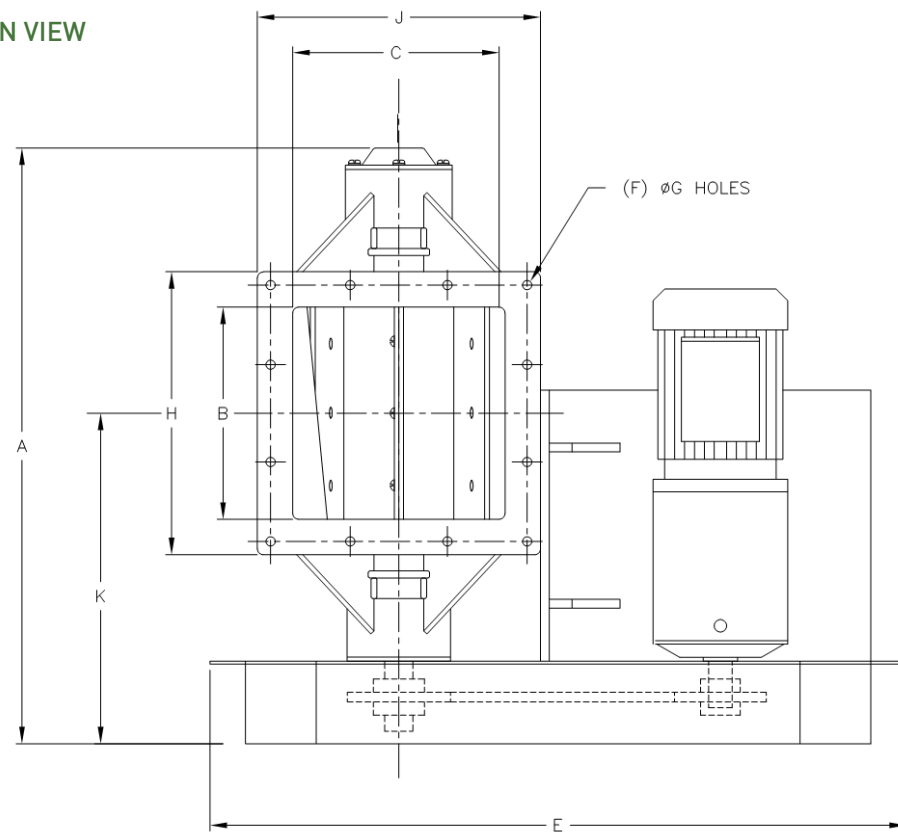
### BENEFITS

Square inlet and outlet flange	More readily matches a square duct arrangement without the need for transitions assuring system compatibility
Fabricated six vane, adjustable/replaceable tip rotor	Maximizes pocket capacity causing less air leakage
Cast iron construction	Offers rugged design providing maximum structural stability
Precision-machined housing	Minimizes rotor-to-barrel clearances limiting leakage
Outboard bearing design	Protects bearings from damaging contaminant extending maintenance cycles
Packing gland type seals	Makes for easy maintenance saving on costs
Tapered throat valve inlet design	Ensures material flow to rotor pockets maximizing performance
Handles differential pressures up to 15 psi	Well suited for pneumatic conveying operations increasing productivity
Chain and sprocket drive	Offers smaller footprint and greater speed selection providing flexibility to the applications being used

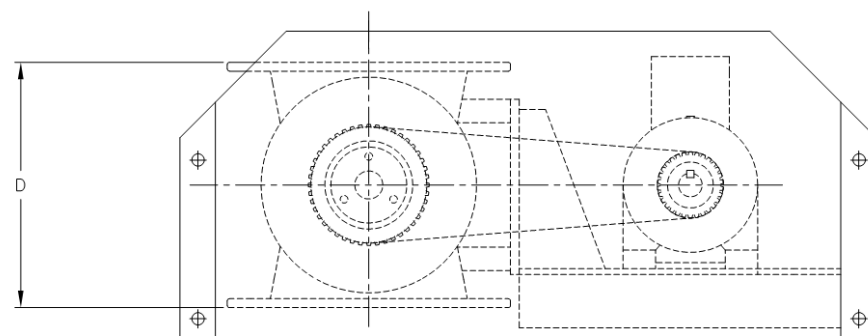
## RVS SERIES ROTARY AIRLOCK VALVE MODEL AVAILABILITY

MODEL	CAPACITY (ft <sup>3</sup> /rev [m <sup>3</sup> /rev]) @ 100% efficiency		A (in. [mm])		B (in. [mm])		C (in. [mm])		D (in. [mm])		E (in. [mm])		F -		G (in. [mm])		H (in. [mm])		J (in. [mm])		K (in. [mm])		Weight (lbs. [kg])	
	RVS-02	0.2	[0.0057]	27	[686]	9	[229]	9	[229]	10 <sup>3</sup> / <sub>8</sub>	[264]	29 <sup>1</sup> / <sub>2</sub>	[750]	12		<sup>7</sup> / <sub>16</sub>	[12]	12	[305]	12	[305]	15 <sup>1</sup> / <sub>2</sub>	[394]	240

PLAN VIEW



ELEVATION VIEW



**NOTE:**  
Information / dimensions shown are for reference only and is subject to change based on final design and applications.

## SPECIFICATIONS

### PROCESS REQUIREMENT

- **Differential Pressure across valve:**  
Max. 15 psig [103 kPag]
- **(Optional) Air Supply for Purge Package:** Max. flow of 10 CFM [17 m<sup>3</sup>/h] @ pressure of 2 psig [14 kPag] higher than operating pressure

### ADD-ON FEATURES

- **Gearbox with NEMA / IEC Motor**
- **Washdown / Chemical / Explosion-Proof Duty Motor**
- **Rotor:**
  - High Temperature Application
  - Hardened Carbon Steel
  - Closed End
  - Filled Pocket
  - Adjustable / Replaceable Tips
- **Seal Purge Package**
- **End Purge Package**
- **Shear Protector**
- **Motion Detector**
- **Convey Attachment**

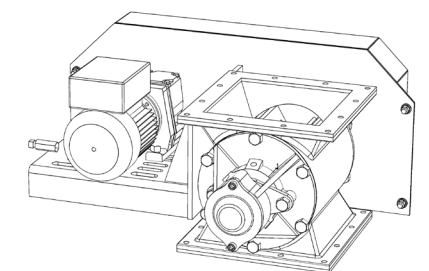
### MATERIAL OF CONSTRUCTION

- **Standard:**
  - Housing: G4000 Cast Iron
  - Rotor: C1018 / C1020 Carbon Steel
  - Shear Protector: A36 Carbon Steel
  - Convey Attachment: A36 Carbon Steel
- **Options:**
  - Housing: Hard Chromed Liner / CF8 Stainless Steel
  - Rotor: Hardened Carbon Steel / 304 Stainless Steel / 316 Stainless Steel
  - Shear Protector: 304 Stainless Steel / 316 Stainless Steel
  - Convey Attachment: 304 Stainless Steel / 316 Stainless Steel

### AVAILABILITY

- **RVS-02**

## RVS02 - ROTARY AIRLOCK VALVE





OUR NAMES HAVE CHANGED. **OUR COMMITMENT TO QUALITY REMAINS.**



## LET US HELP PROVIDE A SOLUTION FOR YOUR NEEDS.

For over 50 years, STT has been designing and installing lime slaking and bulk material handling systems. What makes STT different is our diverse experience in many applications, industries and chemicals, along with the ability to support systems from concept through to decommissioning, and everything in between. To speak with one of our experts, contact us at:

**SALES@STTSYSTEMS.COM**

**+1-905-875-5587**

**STTSYSTEMS.COM**

8485 PARKHILL DRIVE  
MILTON, ON L9T 5E9, CANADA

### IMPORTANT NOTICE

*The information contained in this product data sheet is, to the best of our knowledge, true and accurate. As application-specific factors may impact performance, users are advised to evaluate the product independently to determine suitability for the intended application and use conditions. Product availability and specifications are subject to change without notice.*

