

CV SERIES CONVEYING ROTARY AIRLOCK VALVE



ROUND FLANGE, BLOW-THRU VALVE

The CV Series Conveying Rotary Airlock Valve is designed to handle most types of dry granulated materials including difficult, sticky products in pneumatic conveying systems with conveying pressure up to 15 psi. This outboard bearing airlock has ports on the sides of the end covers that connect directly to the convey line pipe. The conveying air blows through the rotor pockets to assist the material to discharge directly into the conveying line.

This CV Series Rotary Airlock Valve achieves high fill efficiencies with minimum air leakage, due to precise machining and tight rotor clearances. The design of this valve is especially suited for low headroom installations and retrofit applications. The CV Series Conveying Rotary Airlock Valve is available in two sizes, 8" and 12".

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

STT operates as a wholly owned subsidiary of Carmeuse, a leading manufacturer of lime, limestone and mineral-based products.

FEATURES

Round inlet and outlet flange

Fabricated 10 vane, fixed tip rotor

Blow-thru body

Low profile design attaches to the convey line connections

Cast iron construction

Precision-machined housing

Outboard bearing design

Packing gland type seals

Open throat valve inlet design

Handles differential pressures up to 15 psi

Chain and sprocket drive

BENEFITS

Can mate up to a standard ANSI pipe flange as a duct providing more standard compatibility

Better resolution and repeatability in metering resulting in more consistent operation / Maximizes air seal causing less air leakage

Assists the material to discharge reducing product buildup increasing efficiency

Requires less space making it suitable for low headroom installations

Offers rugged design providing maximum structural stability

Minimizes rotor-to-barrel clearances limiting leakage

Protects bearings from damaging contaminant extending maintenance cycles

Makes for easy maintenance saving on costs

Provides more complete pocket filling ensuring maximum material flow

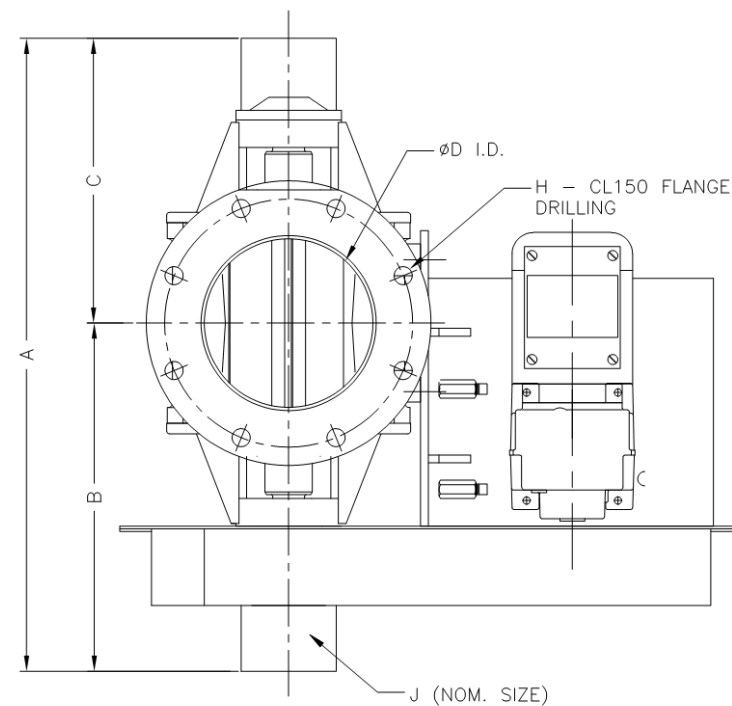
Well suited for pneumatic conveying operations increasing productivity

Offers smaller footprint and greater speed selection providing flexibility to the applications being used

CV SERIES CONVEYING ROTARY AIRLOCK VALVE MODEL AVAILABILITY

MODEL	CAPACITY (ft ³ /rev [m ³ /rev]) @ 100% efficiency		A (in. [mm])		B (in. [mm])		C (in. [mm])		D (in. [mm])		E (in. [mm])		F (in. [mm])		G (in. [mm])		H (NPS [DN])		J (in. [mm])		K (in. [mm])		Weight (lbs. [kg])	
	CV-308	0.3	[0.0085]	30	[762]	16 1/2	[420]	13 1/2	[343]	8 1/4	[210]	15	[381]	29 1/2	[750]	8	[204]	8	[200]	3	[75]	2.9	[74]	365
CV-912	0.9	[0.0255]	34	[864]	18 1/2	[470]	15 1/2	[394]	12 1/2	[318]	19 3/8	[493]	29 1/2	[750]	8	[204]	12	[350]	4	[100]	3.8	[96]	690	[313]

PLAN VIEW



SPECIFICATIONS

PROCESS REQUIREMENT

- **Differential Pressure Across Valve:**
Max. 15 psig [103 kPag]
- **(Optional) Air Supply for Purge Package:** Max. flow of 10 CFM [17 m³/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
 - Filled Pocket
 - Adjustable / Replaceable Tips
- **Seal Purge Package**
- **Shear Protector**
- **Motion Detector**

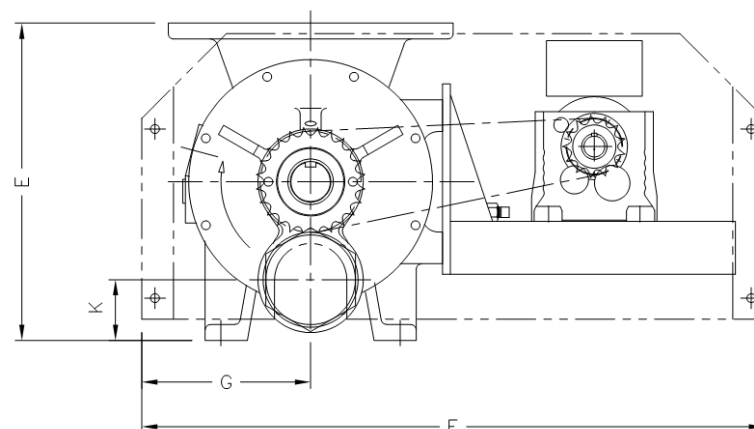
MATERIAL OF CONSTRUCTION

- **Standard:**
 - Housing: G4000 Cast Iron
 - Rotor: C1018 / C1020 Carbon Steel
 - Shear Protector: 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

AVAILABILITY

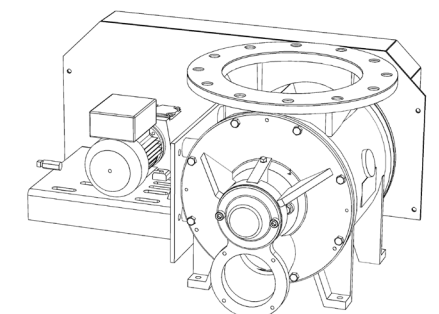
- **CV-308**
- **CV-912**

ELEVATION VIEW



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

CV912 - ROTARY AIRLOCK VALVE





STORAGE & TRANSFER
TECHNOLOGIES

MEMBER OF CARMEUSE GROUP

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



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.

LET US HELP PROVIDE A SOLUTION FOR YOUR NEEDS.

STT is the expert in handling lime that designs, installs, and maintains systems to achieve peak performance for your application so that you are confident that your operations will run more efficiently. As a member of the Carmeuse Group, we are knowledgeable in lime, have over 50+ years of diverse experience, offer state-of-the-art products, and partner with customers throughout the lifecycle of their system and equipment. To speak with one of our experts, contact us at:

SALES@STTSYSTEMS.COM

+1-905-875-5587 • STTSYSTEMS.COM

CANADIAN HEAD OFFICE:
8485 PARKHILL DRIVE
MILTON, ON L9T 5E9, CANADA

US HEAD OFFICE:
3600 NEVILLE ROAD
PITTSBURGH, PA 15225



STT and the STT logo are registered trademarks of Storage & Transfer Technologies, Inc. Carmeuse is a registered trademark of Carmeuse Lime, Inc. © 2022 Storage & Transfer Technologies, All rights reserved. v2022.03.14