

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

FEATURES

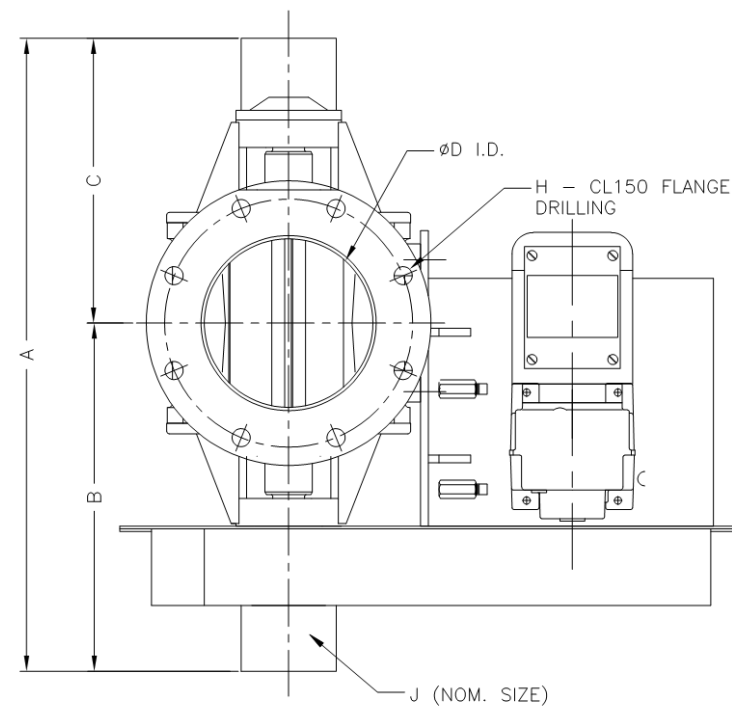
BENEFITS

Round inlet and outlet flange	Can mate up to a standard ANSI pipe flange as a duct providing more standard compatibility
Fabricated 10 vane, fixed tip rotor	Better resolution and repeatability in metering resulting in more consistent operation / Maximizes air seal causing less air leakage
Blow-thru body	Assists the material to discharge reducing product buildup increasing efficiency
Low profile design attaches to the convey line connections	Requires less space making it suitable for low headroom installations
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
Open throat valve inlet design	Provides more complete pocket filling ensuring maximum material flow
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

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**

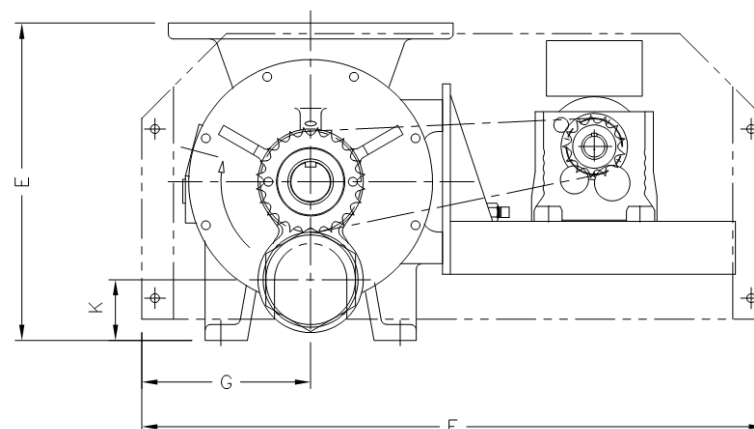
MATERIAL OF CONSTRUCTION

- **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

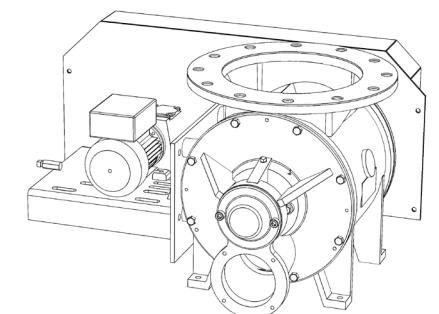
- **CV-308**
- **CV-912**

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





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.

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