CRV Series

COMET PLASTIC EQUIPMENT, LLC

For vacuum or pressure conveying of free-flowing material in plastics, chemicals, pharmaceutical, food, grain, milling and baking applications.

Comet's CRV series rotary valve acts as an air leakage seal for pneumatic conveying or processing systems by allowing powder or solid materials to be regulated into a high pressure conveying line. The CRV can provide an air seal for pneumatic systems, provide product metering or, in combination, provide product metering and act as an air lock feeder.

Vacuum Model: More like a feeder, it meters material into the vacuum line while preventing the material from being blown back up to the source above the valve channelling it into the conveying line.

Pressure Model: Used when a seal is needed at the end of a vacuum system where material is discharged into a silo or hopper. The rotary valve acts as a barrier, preventing air from blowing back into the pressurized vacuum line).

Feed Port Entrance

How it works

During operation, the rotary valve is similar to a revolving door: the blades create a triangular pocket between them and the circular rotation housing, forming an airtight seal. The motor slowly moves the blades allowing the solids to discharge from the hopper or silo. The rotating shaft has blades that fill with product on one side of the valve as the empty pockets are rotated to present a space for material to flow in.

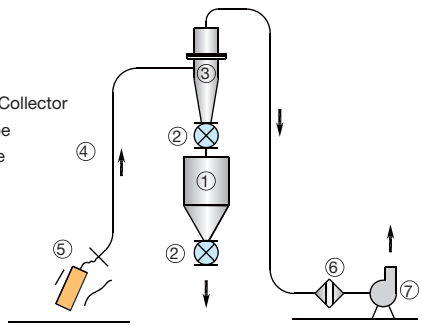
Standard Features

- Upper and lower flanges assure system compatibility and conform to standard specifications.
- Flange specifications can be selected from ANSI, 150 lb, DIN PN10, GB PN10 or JIS 10K.
- The feed port entrance is designed like a "W" to avoid shearing that can fragment the pellet.
- Double lip Teflon seal ensures a tight, long-lasting, low-wearing seal.
- Outboard sealed bearings never need lubrication.

Main Materials

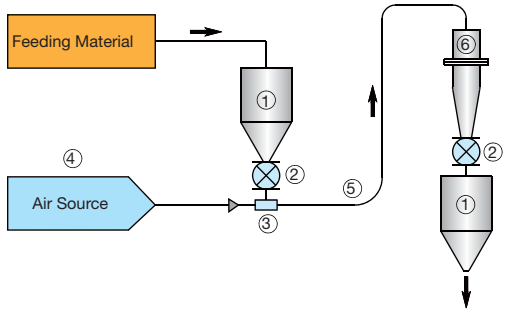
- **Casing:** SCS13 (stainless casting steel)
- **Rotor:** SCS13
- **Side Cover:** AC4B-T6 (design temperature under 212°F (100°C) with aluminum alloy SCS13 casting (design temperature over 212°F (100°C) (stainless steel required with air contacting part)
- **Shaft Sleeve:** SUS304
- **Shaft Seal:** PTFE

① Storage Silo
② Rotary Valve
③ Cyclone Dust Collector
④ Conveying Pipe
⑤ Suction Nozzle
⑥ Dust Filter
⑦ Roots Blower



Vacuum Model

① Storage Silo
② Rotary Valve
③ Accelerating Chamber
④ Air Source
⑤ Conveying Pipe
⑥ Cyclone Dust Collector



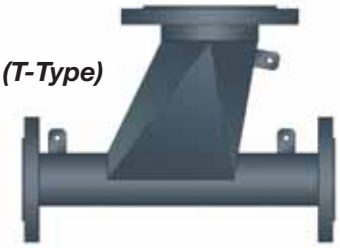
Pressure Model

CRV Series

COMET
PLASTIC EQUIPMENT, LLC

Optional Accessories

SFN (T-Type)



SFH (J-Type)

Feed Nozzles

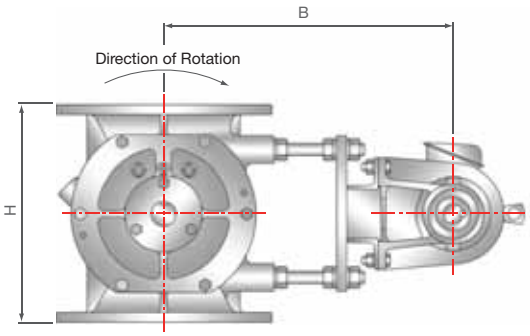
SFN (T-Type): Applicable for pneumatic conveying lines with multi-stations.

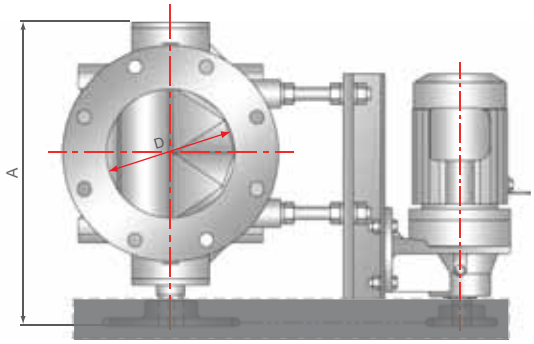
SFH (J-Type): Applicable for dense phase pneumatic conveying where powder residue is not allowed.

Vent Chamber

Normally, light powder is not fed to a rotary valve because of air leakage. This specially designed vent chamber helps the rotary valve work properly and avoid leakage.

Outline Drawings





Specifications

Model	Caliber (inch)	H (mm)	Rotor Capacity (L/Rev)	A (mm)	B (mm)	D (mm)	Drive Motor (kW)	Weight (lbs)
SRV3	3	8.7	0.7	14	12.2	3.3	0.2	88
SRV4	4	10.6	1.9	15.6	13.1	4.3	0.4	143
SRV5	5	11.8	2.8	16.4	13.6	5.3	0.4	154
SRV6	6	13	4.5	17.4	14.1	6.3	0.4	198
SRV8	8	13.8	6.8	19.1	16.2	8.3	0.75	275.5
SRV10	10	16.3	13.3	23	17.4	10.2	0.75	374.75
SRV12	12	19	21.7	23.9	19.1	12.2	1.5	617
SRV14	14	23	42	28	21.3	13.7	2.2	970
SRV16	16	25.4	63	30	22.5	15.6	2.2	1146
SRV18	18	27.5	80	33	23.7	17.6	3.7	1433

COMET
PLASTIC EQUIPMENT, LLC
6555 Garden Rd. Unit 16 • Riviera Beach FL 33404
800-328-5088
Fax: (561) 841-0044