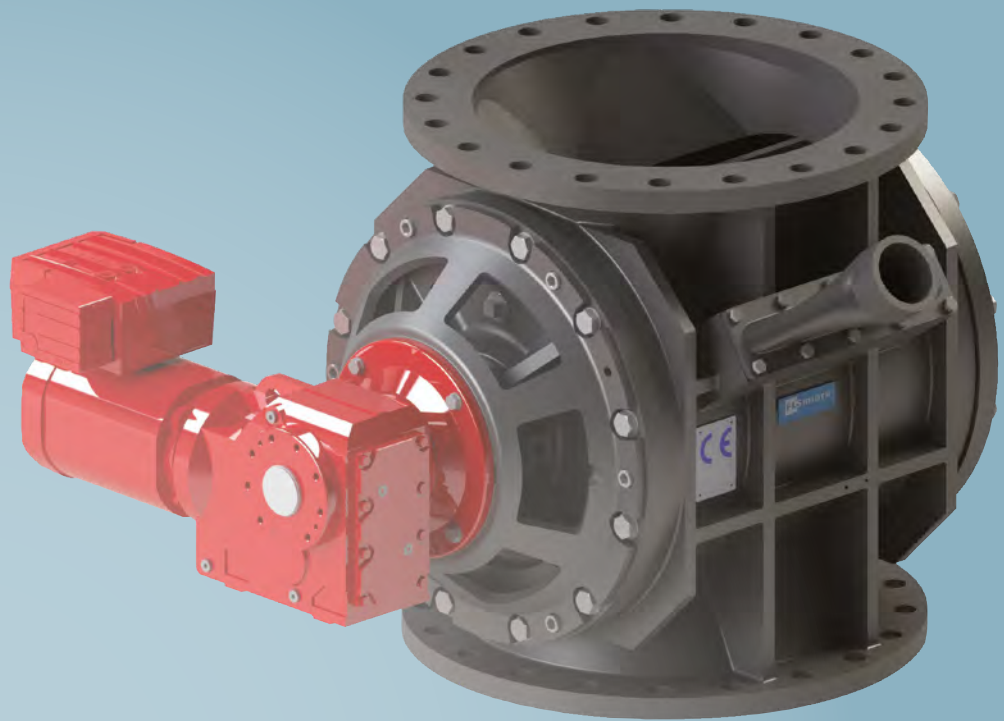


PNEUMATIC CONVEYING

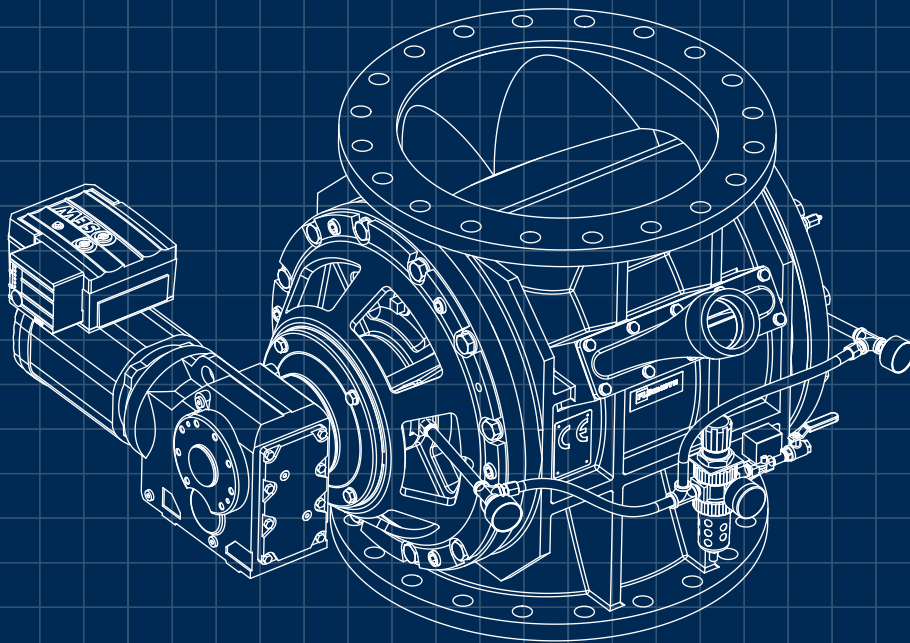
V-Series Feeder / Airlock

Line charger for pneumatic conveying systems



Robust, versatile and efficient

Engineered to solve most feed problems, our V-Series feeder handles dry, fine powder or granular product efficiently in both vacuum or pressure conveying systems and dilute phase and dense phase systems.



Key benefits

■
Efficient shaft
sealing method

■
2 bar pressure
differential

■
Abrasion-
resistant design

■
Meets NFPA /
ATEX standards

■
Direct
mount drive

Long life and economical operation

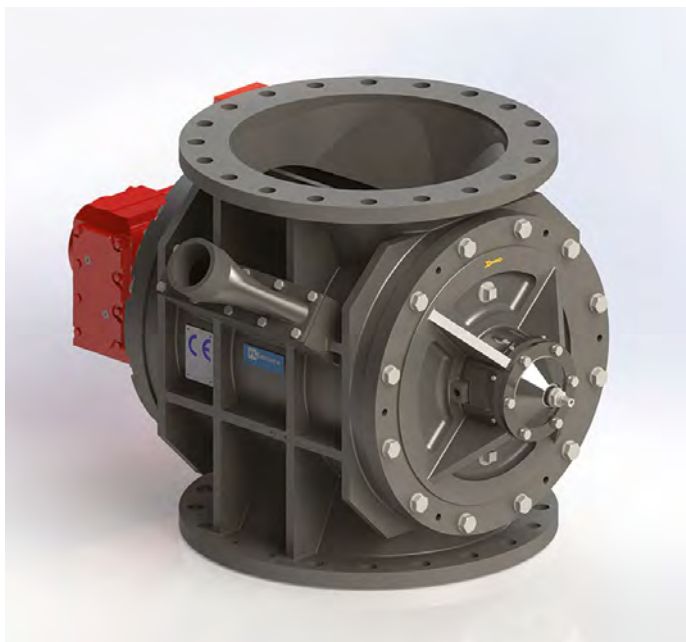
Our V-Series rotary airlock is designed to feed pneumatic conveying systems efficiently and at high-pressure differentials, up to 29 psig (2 Bar). The V-Series feeder handles dry, fine powder or granular product in vacuum or pressure conveying systems. It is suitable for both dilute phase and dense phase systems.

The 10-vane open or closed end rotor design minimizes slip leakage while efficiently feeding through large inlet and outlet openings. The inlet flange has an inverted integrally cast plow for deflecting granular material. Pressurized air from the pockets is vented through a vent connection, keeping the air out of the inlet flange and maintaining even material flow.

The rotor shaft seals minimize air leakage with mechanical lip-type bronze labyrinth seals. The bearings are sealed deep ball bearings that provide very tight peripheral and end clearances. Connections for air purge seal protection are provided with single solenoid and pressure regulator.

The drive system includes a direct mounted right angle bevel gearmotor, TEFC, severe duty with integral variable speed drive (VFD) for modulating speeds of 30 rpm to 5 rpm.

The V-Series feeder is both NFPA and ATEX rated and is available in six sizes: V200 to V600.



Simple design for easier maintenance

Features

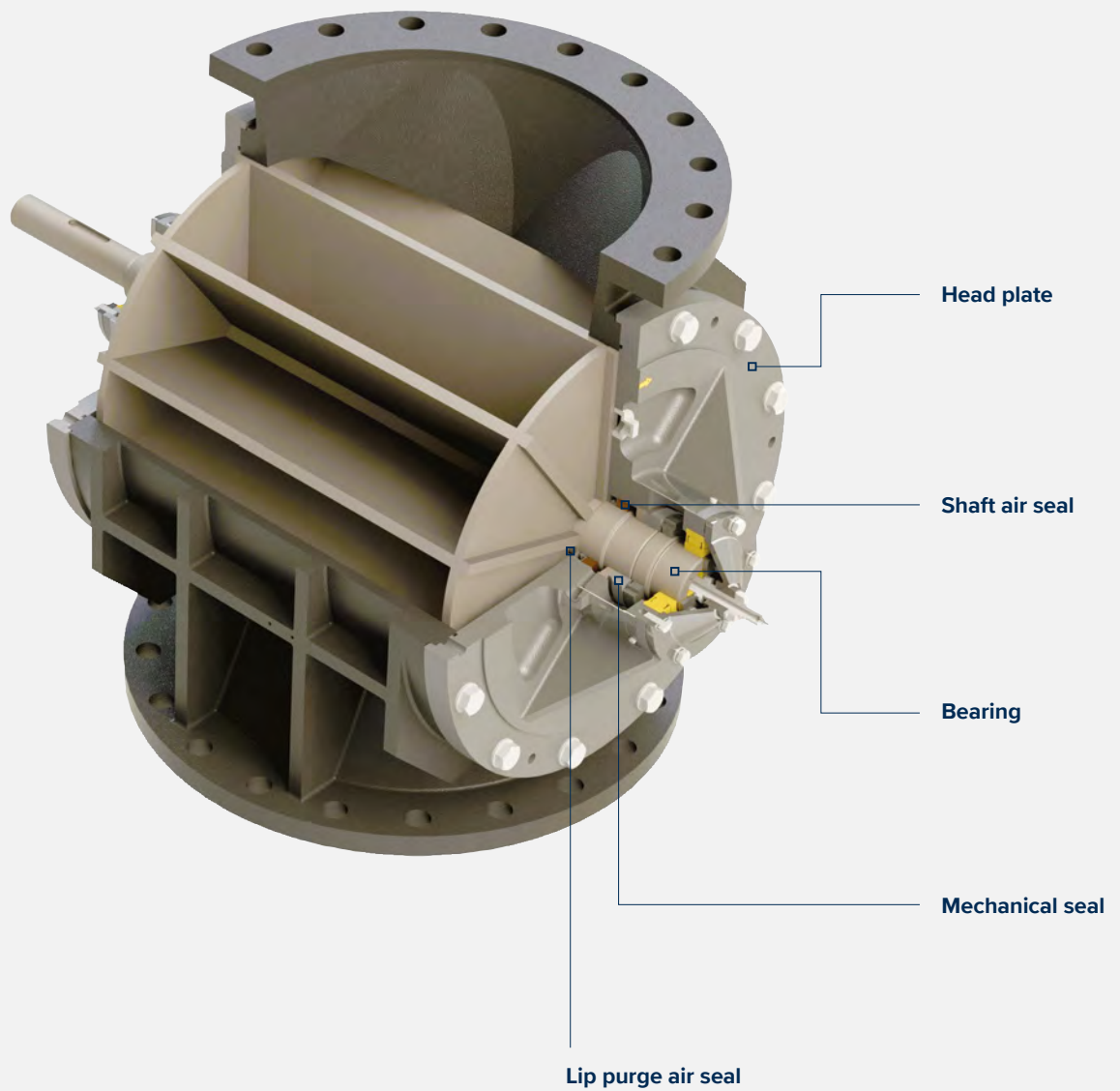
- Heavy-duty design with circular flanged ports
- Ductile iron housing and end plates
- Integral vent design
- Abrasion-resistant plate steel rotor, 10 vane, open or closed
- Efficient shaft sealing method
- Air purge equipment included
- Six sizes: V200 to V600
- Direct mount gearmotor, with variable speed drive (VFD)
- Standard speeds, 30 to 5rpm
- Abrasion-resistant design
- Various voltages
- Temperatures to 400°F (205°C)
- Six sizes - Rotor volumes of .18 ft³/rev to 6.8 ft³/rev
- Up to 2 Bar/29psig pressure differential
- Meets NFPA/ATEX standards
- Flanges for either ANSI or DIN standards
- Steep throat angles and inverted plow
- Integral cast mounting bracket for direct drives
- Right angle gearmotor with VFD
- External clearance adjuster and end plate plugs



V-series feeder with purge air assembly

Innovative shaft sealing design

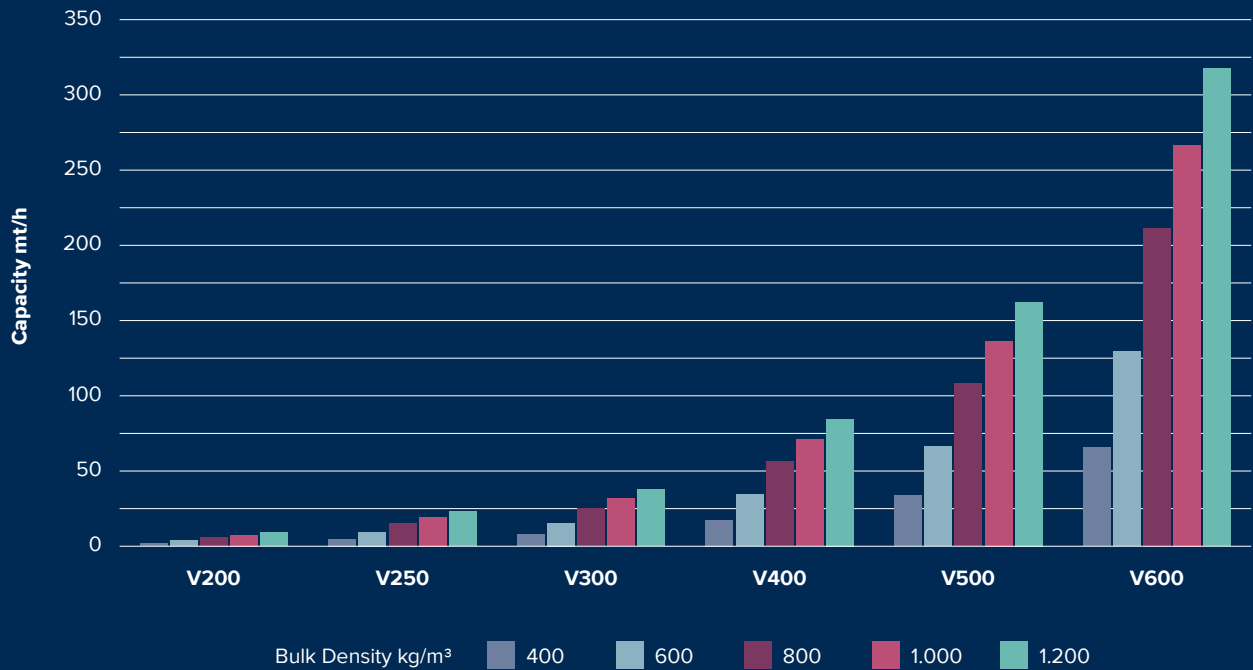
Our seal assembly features a unique seal design consisting of a lip seal, labyrinth seal and mechanical face seal.



Capacity

The variable-speed drive makes it easy to change capacity and allows for material changes.

Feeder capacity is a function of the volume of the feeder pockets, the speed of the rotor (rpm), and volumetric fill efficiency of the material as it fills a pocket.



U.S. units

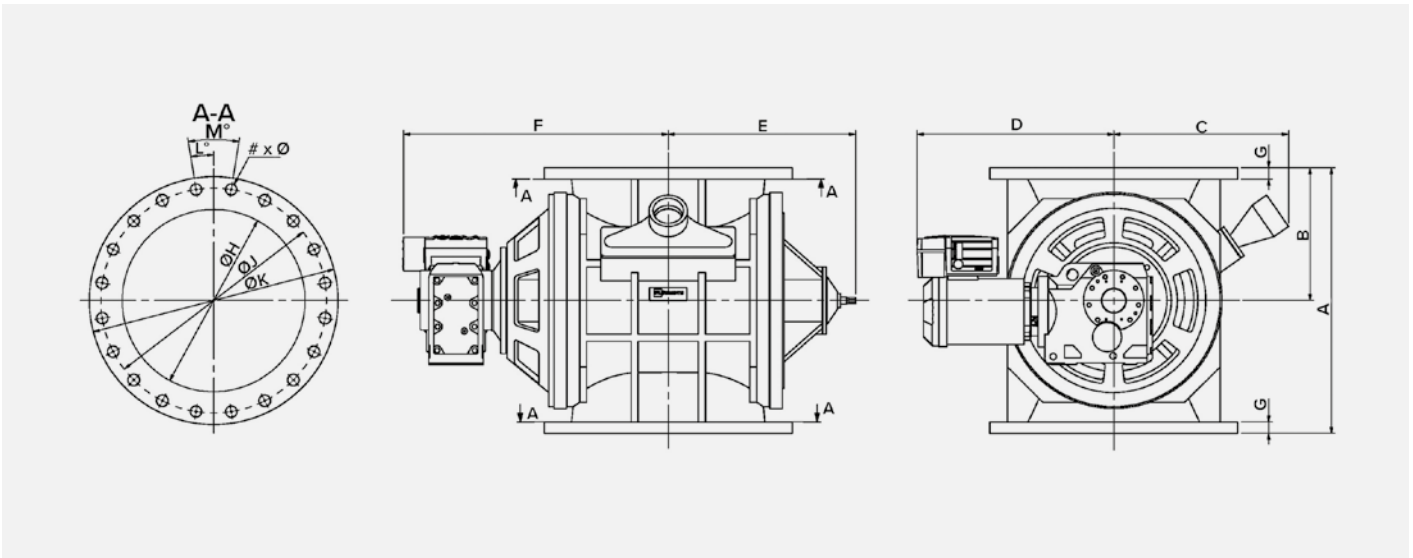
Size	Capacity open (ft ³ /rev)	Capacity closed (ft ³ /rev)	Weight with drive (lbs)	Motor (hp)	Vent size NPT (in)
V200	0.20	0.18	313	1.0	2
V250	0.50	0.46	472	1.5	2
V300	0.83	0.75	774	1.5	2
V400	1.84	1.66	1085	2	3
V500	3.53	3.23	1779	3	3
V600	6.76	6.31	2630	3	3

Metric units

Size	Capacity open (m ³ /rev)	Capacity closed (m ³ /rev)	Weight with drive (kg)	Motor (hp)	Vent size NPT (mm)
V200	0,006	0,005	142	1,0	50,8
V250	0,014	0,013	214	1,5	50,8
V300	0,024	0,021	351	1,5	50,8
V400	0,052	0,047	492	2	76,2
V500	0,10	0,091	807	3	76,2
V600	0,191	0,179	1193	3	76,2

Dimensions

The large diameter flow channel allows efficient linear operation up to 30 rpm; and the inlet/outlet geometry lets the feeder convey larger particles – dust to 19 mm.



U.S. units (in)

Size	A	B	C	D	E	F	G	H	J ANSI	J DIN	K	L (deg)	M (deg)	# x Ø ANSI	# x Ø DIN
V200	12.992	6.496	11.81	17.677	13.780	19.331	0.87	7.87	11.8	11.6	13.6	22.5	45	8x0.88	8x0.87
V250	16.535	8.268	12.480	17.756	15.276	19.606	0.94	10.2	14.3	13.8	15.7	15	30	12x1	12x0.87
V300	19.685	9.843	14.252	17.756	16.850	21.654	0.94	12	17	15.7	18.9	15	30	12x1	12x0.87
V400	23.622	11.811	17.795	19.252	18.937	26.220	1.1	15.7	21.3	20.3	23.6	11.25	22.5	16x1.13	16x1.02
V500	29.528	14.764	19.409	21.890	20.827	29.409	1.26	20.3	25	24.4	27.6	9	18	20x1.25	20x1.02
V600	35.433	17.717	22.126	21.890	23.819	32.638	1.38	24.2	29.5	28.5	32.1	9	18	20x1.38	20x1.02

Metric units (mm)

Size	A	B	C	D	E	F	G	H	J ANSI	J DIN	K	L (deg)	M (deg)	# x Ø ANSI	# x Ø DIN
V200	330	165	284	449	350	491	22	200	299	295	345	22.5	45	8x22	8x22
V250	420	210	317	451	388	498	24	260	362	350	400	15	30	12x25	12x22
V300	500	250	362	451	428	550	24	305	432	400	480	15	30	12x25	12x22
V400	600	300	452	489	481	666	28	400	540	515	600	11,25	22,5	16x29	16x26
V500	750	375	493	556	529	747	32	515	635	620	700	9	18	20x32	20x26
V600	900	450	562	556	605	829	35	615	749	725	815	9	18	20x32	20x30



Our pneumatic conveying experts are here to help.

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Bringing better solutions to light

in the cement and mining industries

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