

Application

Volumetric feeding of free flowing to very hard flowing powders (e.g. lumpy, moist or bridge building materials) as well as fibers, flakes and other bulk materials. The feeder can be upgraded to a loss-in-weight feeder system at any time.

Design

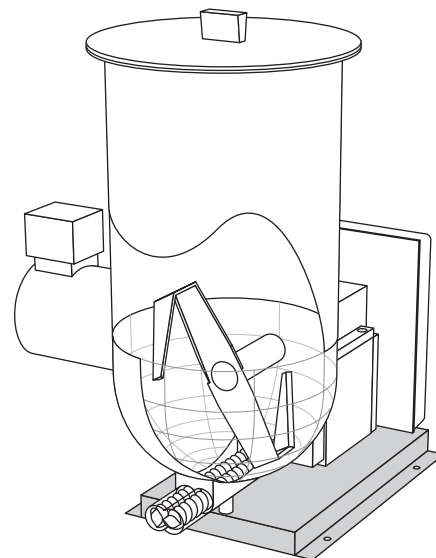
Twin screw feeder with interchangeable feeding tools. All parts in contact with the material being fed are stainless steel. Feeding equipment is easy to disassemble. The horizontal agitator gently moves the bulk material to the large throat and then into the screws.

Controller: (see separate data sheets)

The SmartConnex® control system allows individual or multi-component control. Each feeder has its own control module. Connection between feeders, operator interface and smart I/O is via an industrial network. A variety of protocols is available for connection to the plant's host system.

Hazardous Location Options: (see sheet I-000002)

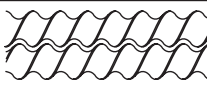
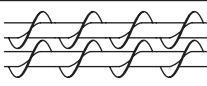
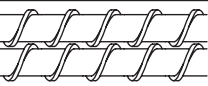
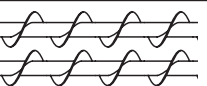
- NEC Class II, Div. 2, Groups F & G / Class II, Div. 1, Groups F & G
- Class I, Div. 2, Groups C & D / Class I, Div. 1, Groups C & D
- ATEX 3D/3D, 3D/2D, 3G/3G, 2GD/2GD (outside/inside)



Feed Screws and Feed Rates

Actual feeder screws are determined based on the material being fed.

Attention: The following rates are theoretical values for free flowing materials being fed volumetrically. Actual feed rates depend on individual material characteristics. The feed range for loss-in-weight feeders is somewhat smaller. For feed rates at the upper or lower limits of the theoretical range, check with a K-Tron Test Lab.

Pitch	Type of drive									Speed range	Gearbox type
		dm ³ /h	ft ³ /hr	dm ³ /h	ft ³ /hr	dm ³ /h	ft ³ /hr	dm ³ /h	ft ³ /hr		
coarse pitch	⊖	2 - 200	0.07 - 7.1	3 - 200	0.11 - 7.1	2.5 - 200	0.088 - 7.1	1.7 - 170	0.06 - 6	8 - 746	A
		0.7 - 70	0.025 - 2.5	1.2 - 115	0.042 - 4.1	0.9 - 82	0.032 - 2.9	0.7 - 70	0.025 - 2.5	4 - 357	B
		0.3 - 20	0.011 - 0.7	0.5 - 45	0.018 - 1.6	0.3 - 30	0.011 - 1.1	0.6 - 26	0.021 - 0.92	2 - 154	C
	⊕	12 - 200	0.42 - 7.1	12 - 200	0.42 - 7.1	12 - 200	0.42 - 7.1	10 - 170	0.35 - 6	52 - 910	A
		6 - 95	0.21 - 3.4	6 - 95	0.21 - 3.4	6 - 95	0.21 - 3.4	4.5 - 81	0.16 - 2.9	25 - 435	B
		2.5 - 41	0.088 - 1.4	2.5 - 41	0.088 - 1.4	2.5 - 41	0.088 - 1.4	2 - 35	0.071 - 1.2	11 - 188	C
fine pitch	⊖	0.7 - 70	0.025 - 2.5	1 - 90	0.035 - 3.2	1 - 90	0.035 - 3.2	0.8 - 76	0.028 - 2.7	8 - 746	A
		0.3 - 27	0.011 - 0.95	0.4 - 40	0.014 - 1.4	0.4 - 40	0.014 - 1.4	0.4 - 34	0.014 - 1.2	4 - 357	B
		0.1 - 9	0.004 - 0.32	0.15 - 16	0.005 - 0.56	0.15 - 15	0.005 - 0.53	0.2 - 13	0.007 - 0.46	2 - 154	C
	⊕	4 - 70	0.14 - 2.5	5.2 - 90	0.18 - 3.2	5.2 - 90	0.18 - 3.2	4.4 - 76	0.16 - 2.7	52 - 910	A
		2 - 33	0.071 - 1.2	2.5 - 43	0.088 - 1.5	2.5 - 43	0.088 - 1.5	2.2 - 36	0.078 - 1.3	25 - 435	B
		0.35 - 6	0.013 - 0.21	0.6 - 10	0.021 - 0.35	0.6 - 11	0.021 - 0.39	0.5 - 9.5	0.018 - 0.34	11 - 188	C

- ⊖ DC-motor with speed controller / Range 1 : 100 / Max. motor speed 2000 RPM
Pre-reducer with a reduction of 1:4 available for use with B or C gearboxes and DC motor.
- ⊕ AC-motor with frequency inverter / Range 1 : 17 / Max. motor speed 2440 RPM /
NOTE: in USA AC motor range is 1:12 with max. motor speed of 1725

Configuration

	Description	Selection	Remarks	Weight kg (lb)	
	Cover	plastic stainless		24 (52.8)	
	Hopper	12 dm ³ (0.4 ft ³)			
	Motor	180 V DC 0.95 kW IP 65 standard	3 phase AC freq. inverter KS: 230/400 V KA: 230/460 V 0.55 kW, IP 55		
	Gearbox	A B C B+V C+V			
	Outlet	Horiz. outlet (std) Vertical outlet Pressure compensation			

Materials:

Material contact parts*: Stainless steel
 DIN 1.4404, 1.4435 (AISI 316L)
 DIN 1.4409 (ASTM A743 CF3M)
 *Horiz. agitator: DIN 1.4034 (AISI 420) standard
 DIN 1.4404 (AISI 316L) option
 Seals: PTFE, Neoprene, Silicone
 Painting: Light grey RAL 7035

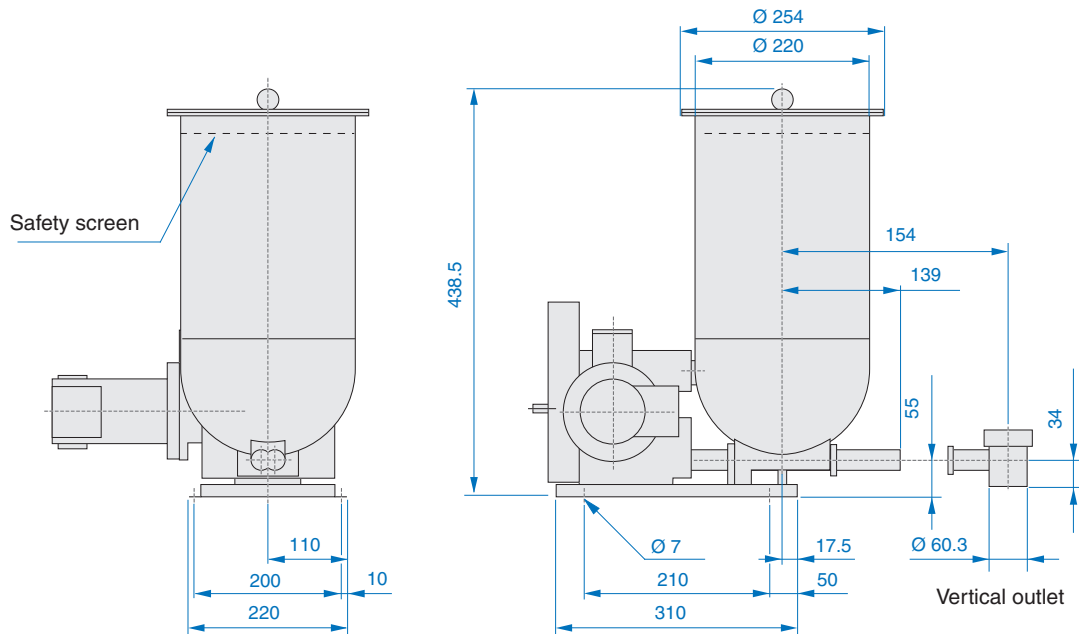
Temperature-Limits:

Ambient: 0 to 40.5 °C (32 to 105 °F)
 Material: standard: -20 to 55 °C (-4 to 130 °F)
 option: -15 to 150 °C (0 to 300 °F)

Options

- 1 Safety screen
- 2 Vertical outlet
- 3 Special paint / finish
- 4 Extended screws

Dimensions mm (in)



Caution: these measurements are for general reference only. Please consult dimensional drawing for exact measurements