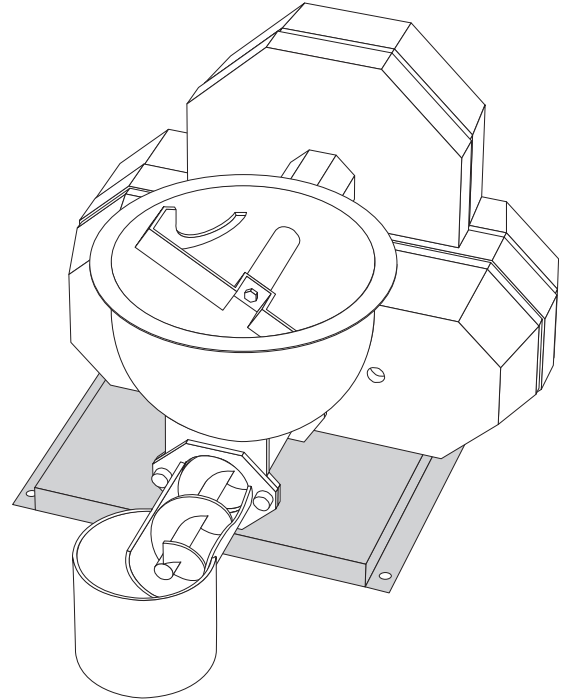


Application

Volumetric feeding of free flowing powders, granules and other bulk materials. The feeder can be upgraded to a loss-in-weight feeder system at any time.

Design

Single 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 modular components are held together by V-clamps. The horizontal agitator gently moves bulk material to the large throat and then into the discharge screws. It is removable without tools. The horizontal agitator speed totals 5% of the screw speed. High and low reducer ranges are available. The user will need to select either high or low range. Unit can mechanically be changed over as necessary. This equipment conforms to CE standards regarding EMC and safety.



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, Group D / Class I, Div. 1, Group 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	Auger screw			Spiral screw			Maximum Particle Size mm (in)	Reduction/ Max Screw Speed (RPM)
	8.9 (0.35)	8.9 (0.35)	13.9 (0.55)	8.9 (0.35)	8.9 (0.35)	13.9 (0.55)		
Coarse	60mm	80mm	100mm	60mm	80mm	100mm	dm ³ /hr	High 5:1 / 400
	35 - 3400	80 - 7750	160 - 15800	35 - 3100	75 - 7100	155 - 15300		
	1.2 - 120	2.8 - 274	5.7 - 560	1.2 - 110	2.7 - 250	5.5 - 54	dm ³ /hr	Low 8.4:1 / 237
	20 - 2000	50 - 4500	90 - 9300	20 - 1800	45 - 4250	90 - 8750	ft ³ /hr	
Fine	8.9 (0.35)	8.9 (0.35)	13.9 (0.55)	8.9 (0.35)	8.9 (0.35)	13.9 (0.55)	Maximum Particle Size mm (in)	High 5:1 / 400
	60mm	80mm	100mm	60mm	80mm	100mm		
	20 - 1700	40 - 3800	85 - 8500	20 - 1700	35 - 3500	80 - 7900	ft ³ /hr	Low 8.4 / 237
	0.7 - 60	1.4 - 135	3 - 300	0.70 - 60	1.2 - 125	2.8 - 280	dm ³ /hr	
10 - 990	25 - 2250	55 - 5100	10 - 990	25 - 2100	50 - 4500	ft ³ /hr		
	0.4 - 35	0.9 - 80	1.9 - 180	0.4 - 35	0.9 - 75	1.8 - 160		

DC-motor with speed controller / Range 1 : 100 / Max. motor speed 2000 RPM

Feed rates when using AC motors: The feed rates may here be roughly estimated through a calculation using the screw speeds.

Europe/Asia: AC motor with frequency inverter / Range 1 : 17 / Max. motor speed 2440 RPM

Americas: AC motor with frequency inverter / Range 1 : 12 / Max. motor speed 1725 RPM

Configuration

Configuration	Description	Alternatives	Remarks	Weight kg (lb)	
	Vertical agitator	KS: 230/400 VAC 1.5 kW IP55	KA: 115/230 VAC 1 HP or 180/200 VDC 1, 1.5 HP	10D 130 (286)	
	Cover			10D 27 (59)	
	Extension hopper			10D see below	
	Horiz. agitator				1.8 (4)
	Trough		15 L		7 (15.4)
	Gearbox				28 (62)
	Motor	200 V DC 1.6 kW IP 65	3 phase with freq. inverter KS: 230/400 VAC KA: 230/460 VAC 1.5 kW, IP 55	standard: 1.6 kW	30 (66)
Screws			see page 1	6 (13.2)	
Outlet		Horiz. outlet Vertical outlet Pressure compensation	standard: horiz. outlet	5 (11)	

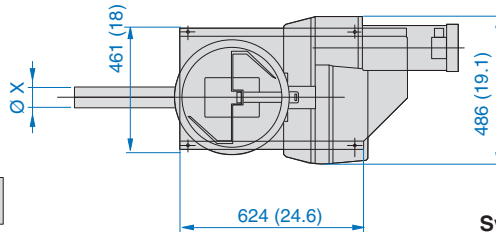
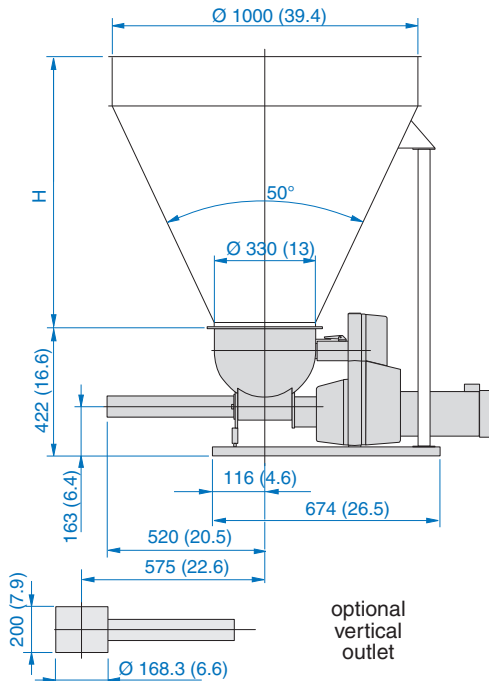
Materials:

Product 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, Silicon
 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: -20 to 150 °C (-4 to 300 °F)

Dimensions mm (in)



Options

- 1 Standard hopper
- 2 Vertical outlet
- 3 Special paint / finish
- 4 Extended screws

Ø Screw & Tube (X)

60 (2.4)	70 (2.8)
80 (3.1)	89 (3.5)
100 (3.9)	114 (4.5)

Symmetrical Hoppers

Volume dm ³ (ft ³)	H mm (in)	Weight kg (lb)
250 (9)	732 (29)	37 (81)
450 (15)	1086 (43)	59 (130)
750 (26)	1450 (57)	82 (180)
1100 (39)	1820 (72)	106 (234)
1400 (49)	2350 (93)	140 (308)

6D and 16D hoppers also available

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