

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.

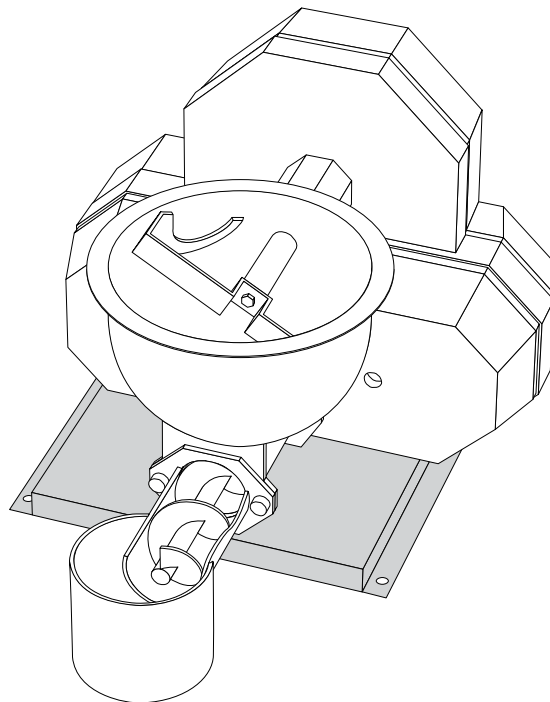
This equipment conforms to CE standards regarding EMC and safety.

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)

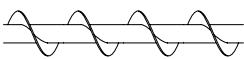
- NEC Class II, Div. 2, Groups F & G / Class II, Div. 1, Groups F & G
- Class I, Div. 2, Group D / Class I, Div. 1, Group D
- ATEX 3D/3D, 3D/2D, 3G/3G, 2GD/2GD (outside/inside)



Feed Screws and Sample Feed Rates

Feeder screws are determined based on the material being fed. The theoretical throughput range of 1:100 is influenced by feeder configuration and material characteristics. The sample feed rates below were tested with a free-flowing material (semolina, bulk density 0.783 kg/dm³).

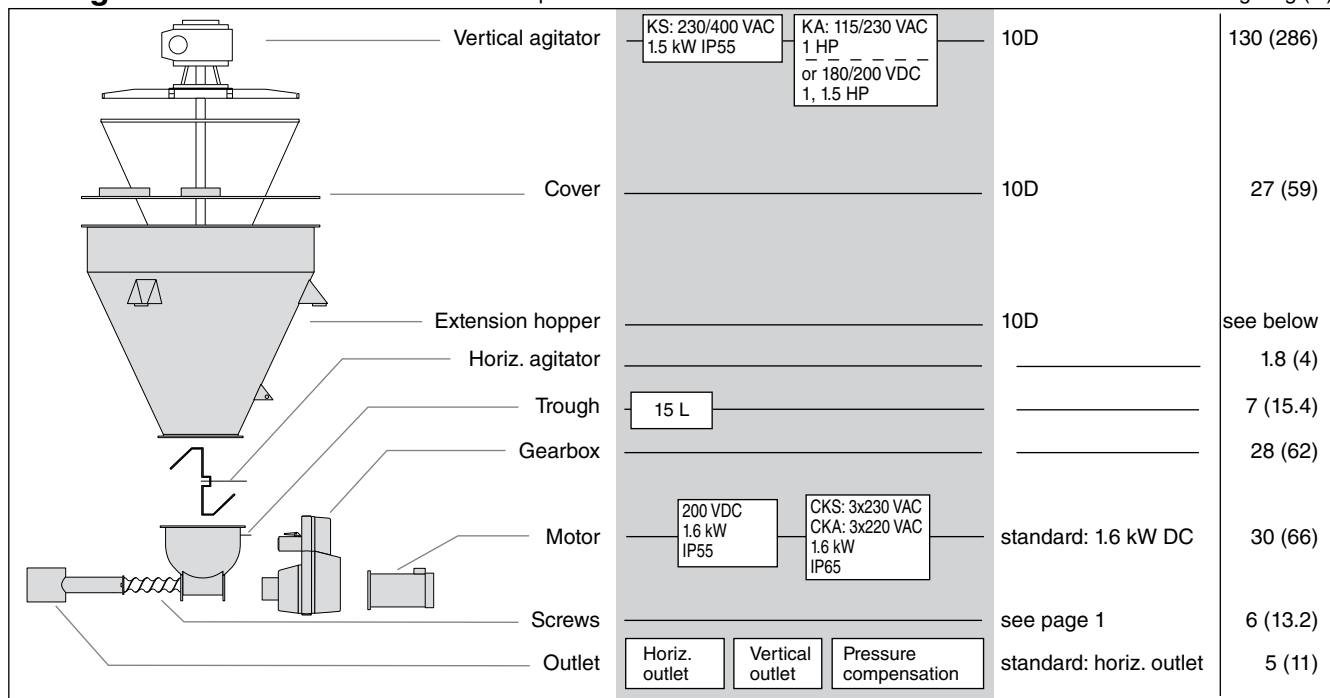
Attention: Actual feed rates depend on individual material characteristics. For feed rates at the upper or lower limits of the theoretical range, check with a Coperion K-Tron Test Lab.

Pitch	DN	 Auger screws			 Spiral screws			Reduction / Screw Speed (RPM)
		ø60	ø80	ø100	ø60	ø80	ø100	
Coarse	dm³/h	37 - 3474	93 - 7775	217 - 17135	40 - 3135	70 - 5946	174 - 12455	High (5.01:1) 4 - 399
	ft³/h	1.3 - 123	3.3 - 274	7.7 - 605	1.4 - 111	2.5 - 210	6.1 - 440	
	dm³/h	20 - 2000	53 - 4480	125 - 10944	23 - 1962	46 - 3636	93 - 7310	Low (8.4:1) 2.4 - 238
	ft³/h	0.7 - 71	1.9 - 158	4.4 - 386	0.8 - 69	1.6 - 128	3.3 - 258	
Fine	dm³/h	21 - 2100	60 - 4537	119 - 11126	22 - 2008	53 - 4760	119 - 9864	High (5.01:1) 4 - 399
	ft³/h	0.7 - 74	2.1 - 160	4.2 - 393	0.8 - 71	1.9 - 168	4.2 - 348	
	dm³/h	13 - 1245	29 - 2677	66 - 6556	12 - 1100	30 - 2839	65 - 5819	Low (8.4:1) 2.4 - 238
	ft³/h	0.5 - 44	1 - 94	2.3 - 231	0.4 - 39	1.1 - 100	2.3 - 205	

Feed rates shown are with DC motor and KCM controller (Range 1:100 / Max. motor speed 2000 RPM).

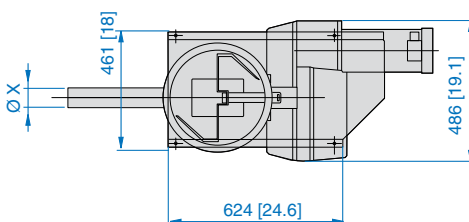
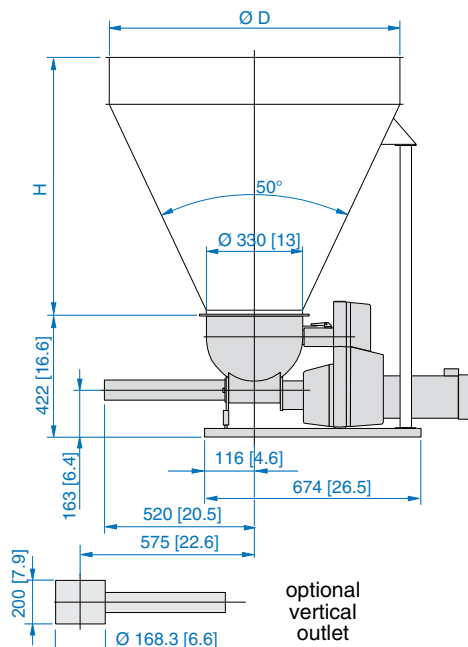
For feed rates with vector-duty AC motor with speed pick-up and KCM controller multiply values by 0.875 (Range 1:100 / Max. motor speed 1750 RPM).

Weight kg (lb)



Ambient: 0...40°C [32...104°F]
Material: 0...50°C [32...122°F]
for other material temperatures contact factory

6D and 16D hoppers also available



60 [2.4]	70 [2.8]
80 [3.1]	89 [3.5]
100 [3.9]	114 [4.5]

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