

**Application**

Volumetric feeding of free flowing to very poorly 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**

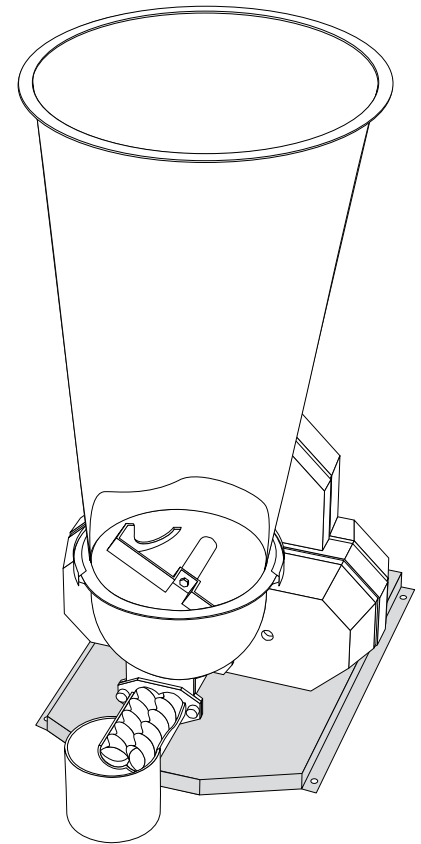
Twin screw feeder with interchangeable feeding tools.  
 All parts in contact with the material being fed are stainless steel. Feeding equipment is easy to disassemble. The horizontal agitator gently moves the bulk material to the large throat and then into the screws. Feeder screws are easily interchangeable.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

Pitch	Twin concave-profile screws	Twin auger screws	Twin spiral screws	Double auger screws		Reduction/Max Screw Speed (RPM)
Coarse	16 - 1600	25 - 2500	7.1 - 710	7.1 - 710	dm³/hr	High
	0.56 - 56	0.88 - 88	0.25 - 25	0.25 - 25	ft³/hr	3.3:1 / 600
	4 - 396	6.3 - 625	1.8 - 178	1.8 - 178	dm³/hr	Low
Fine	0.14 - 14	0.22 - 22	0.06 - 6.3	0.06 - 6.3	ft³/hr	16.7:1 / 120
	7.10 - 710	11.3 - 1130	4.96 - 496	4.96 - 496	dm³/hr	High
	0.250 - 25.0	0.400 - 40.0	0.175 - 17.5	0.175 - 17.5	ft³/hr	3.3:1 / 600
	1.78 - 178	2.83 - 283	1.25 - 125	1.25 - 125	dm³/hr	Low
	0.063 - 6.30	0.100 - 10.0	0.044 - 4.40	0.044 - 4.40	ft³/hr	16.7:1 / 120

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**

Description	Alternatives	Remarks	Weight kg (lb)
Vertical agitator	KS: 230/400 VAC 0.18, 0.25 kW IP55	4D (50 L, 80 L) 6D (110 L)	25 (55) 36 (79)
Cover	KA: 115/230 VAC 0.25, 0.33 HP or 100/200 VDC 0.33 HP	2D 4D 6D	1 (2.2) 2 (4.4) 3 (6.6)
Extension hopper		2D, 4D or 6D	see below
Horiz. agitator			0.7 (1.5)
Trough	5 L		2.5 (5.5)
Gearbox			15 (33)
Motor	100/200 V DC 0.45 kW IP 65	standard: 0.45 kW	12 (26.4)
Screws	3 phase with freq. inverter KS: 230/400 VAC KA: 230/460 VAC 0.55 kW, IP 55	see page 1	2 (4.4)
Outlet	Horiz. outlet    Vertical outlet    Pressure compensation	standard: horiz. outlet	1 (2.2)

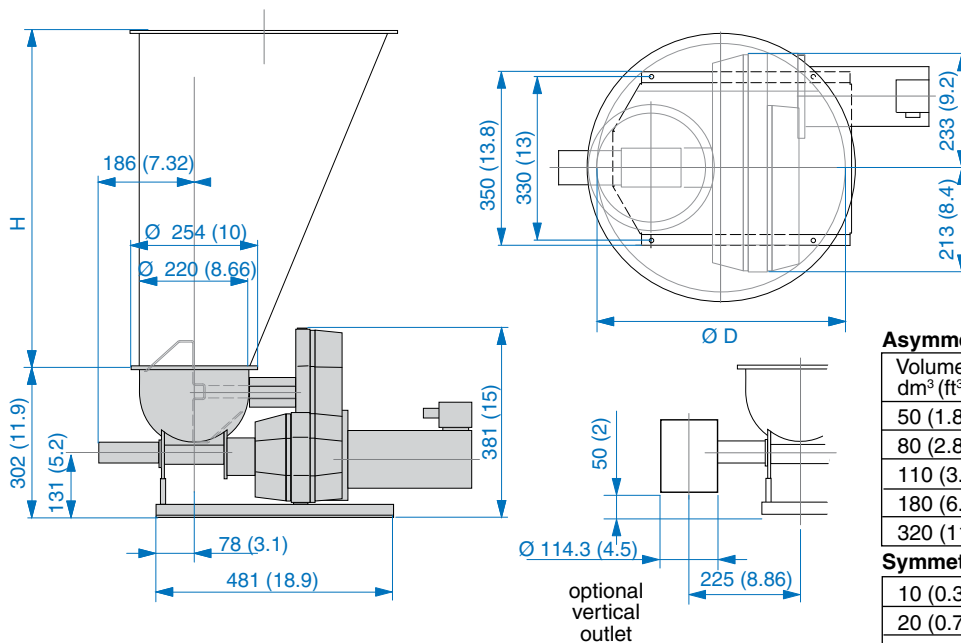
**Materials:**

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

**Asymmetrical Hoppers**

Volume dm <sup>3</sup> (ft <sup>3</sup> )	H mm (in)	D mm (in)	Weight kg (lb)
50 (1.8)	615 (24.2)	400 (15.7)	7 (15.4)
80 (2.8)	869 (34.2)	400 (15.7)	11 (24.2)
110 (3.9)	922 (36.3)	600 (23.6)	17 (37.4)
180 (6.4)	1176(46.3)	600 (23.6)	23 (50.6)
320 (11.3)	1684 (66.3)	600 (23.6)	35 (77)

**Symmetrical Hoppers**

Volume dm <sup>3</sup> (ft <sup>3</sup> )	H mm (in)	D mm (in)	Weight kg (lb)
10 (0.35)	283 (11)	220 (8.7)	3 (6.6)
20 (0.71)	566 (22.3)	220 (8.7)	6 (13.2)
80 (2.8)	727 (28.6)	400 (15.7)	11 (24.6)
180 (6.4)	889 (35)	600 (23.6)	23 (50.6)

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