

Ext. communication to Host System  
 A Feeder  
 B Weighing System  
 C Control Module  
 D Operator Interface

Each Coperion K-Tron Weigh feeder consists of the components A, B, C and D.

Component A is specified here.

## Application

Gravimetric 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.

## Design

Twin screw feeder with interchangeable feeding tools suspended in a three-point weighing system. 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.

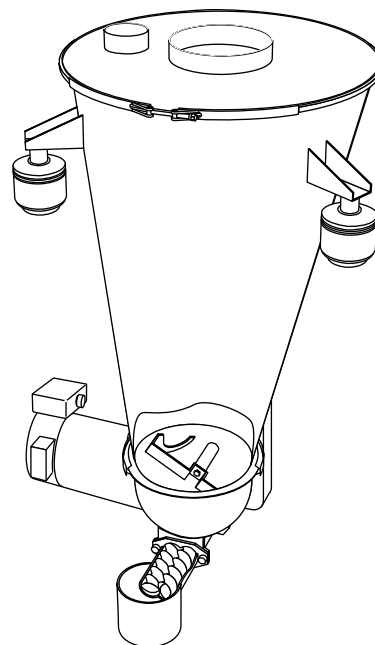
This equipment conforms to CE standards regarding EMC and safety.

**Controller:** (see separate spec sheets)

The SmartConnex® control system allows individual or multi-component control. Interface-modules for computer communications are installed in the control module.

**Hazardous Location Options:** (see sheet I-000002)

- NEC Class I, Div. 1 & 2, Group C & D  
Class II, Div. 1 & 2, Group F & G
- 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	Type of drive	Twin concave screws		Twin auger screws		Twin spiral screws		Double auger screws		Screw speed range	Gearbox type
		dm <sup>3</sup> /h	ft <sup>3</sup> /h	dm <sup>3</sup> /h	ft <sup>3</sup> /h	dm <sup>3</sup> /h	ft <sup>3</sup> /h	dm <sup>3</sup> /h	ft <sup>3</sup> /h		
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

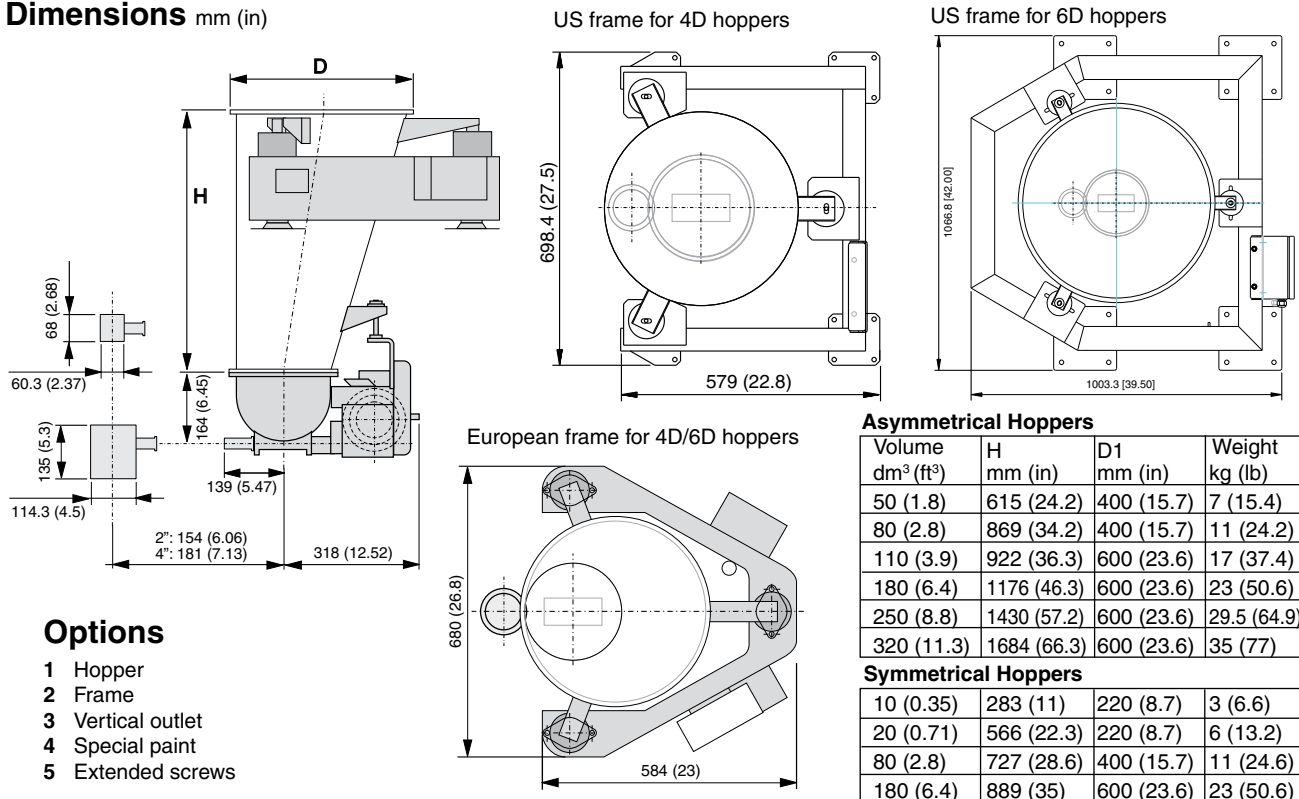
**Configuration**

Description	Selection	Remarks	Weight kg (lb)
Vertical agitator	KS: 230/400 VAC 180, 250 W IP55	4D (50 L, 80 L) 6D (110 L, 180 L)	25 (55) 36 (79)
Cover	KA: 115/230 VAC 0.25, 0.33 HP or 100/200 VDC 0.33 HP	4D 6D	2 (4.4) 3 (6.6)
Weigh bridge 3 x K-SFT:	30 kg 66 lb	IP65, NEMA 4 Gross weigh bridge capacity = 3 x K-SFT	
	60 kg 132 lb		
	90 kg 198 lb		
	120 kg 264 lb		
Extension hopper		4D or 6D	see below
Horiz. agitator			0.7 (1.5)
Trough	5 L		2.5 (5.5)
Gearbox	A B C		6 (13.2)
Motor	100 or 200 VDC 450 W IP65	standard: 450 W	12 (26.4)
	180 VDC 950 W IP65		
	3 phase AC freq. inverter KS: 230/400 V KA: 230/460 V 550 W, IP55		
Screws		see page 1	2 (4.4)
Outlet	Horiz. outlet    Vertical outlet    Pressure compensation	standard: horiz. outlet	1 (2.2)

**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, Silicon  
Painting: Light gray RAL 7035

**Weighing Range:**  
Gross weighbridge capacity (e.g. 3 x 60 = 180 kg) less total feeder weight and less 10% reserve  
**Temperature-Limits:**  
Ambient: 0 to 40°C (32 to 104°F)  
Material: 0 to 50°C (32 to 122°F)  
*for other material temperatures contact factory*

**Dimensions** mm (in)



**Options**

- 1 Hopper
- 2 Frame
- 3 Vertical outlet
- 4 Special paint
- 5 Extended screws

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