

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).

## Design

Twin screw feeder with interchangeable feeding tools mounted on a platform scale. All parts in contact with the bulk material being fed are stainless steel. Feeding equipment is easy to dismantle. The horizontal agitator gently moves bulk material to the large throat and into the discharge screws. Feeder screws are easily interchangeable. The scale housing is completely enclosed. This equipment conforms to all applicable European Directives (e.g. Machinery, EMC).

**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:

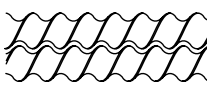
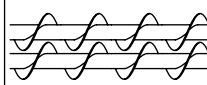
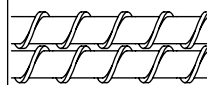
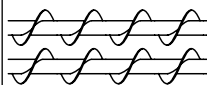
NEC Class II, Div. 2, Groups F & G  
ATEX 3D/3D, 3D/2D (outside/inside)



## Feed Screws and Sample Feed Rates

Feeder screws are determined based on the material being fed. The theoretical throughput range 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. At higher screw speeds a poorly flowing powder may only achieve 30-50% of the throughput possible with a free-flowing material due to reduced degree screw fill. For feed rates at the upper or lower limits of the theoretical range, check with a Coperion K-Tron Test Lab.

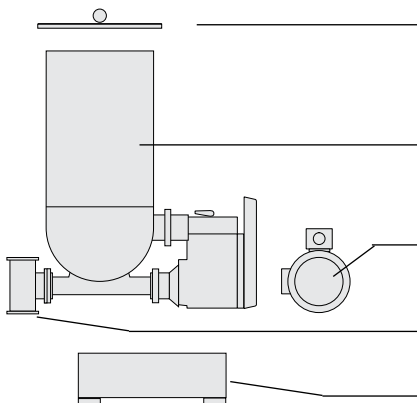
Pitch		 Twin concave screws	 Twin auger screws	 Twin spiral screws	 Double auger screws	Max. screw speed
coarse	dm³/h	0.35 - 254	0.6 - 371	0.4 - 288	0.4 - 254	746 RPM
	ft³/h	0.013 - 8.97	0.019 - 13.10	0.014 - 10.17	0.014 - 8.97	
fine	dm³/h	0.2 - 138	0.15 - 112	0.25 - 185	0.3 - 202	
	ft³/h	0.007 - 4.87	0.006 - 3.95	0.009 - 6.53	0.011 - 7.13	

Feed rates shown are with servo motor and KCM controller (max. motor speed 2000 RPM). For feed rates with DC or AC motors consult factory.

Coperion K-Tron Product Specification  
Twin Screw Compact Feeder

K-CL-SFS-KT20

Configuration

	Description	Alternatives	Remarks	Weight kg [lb]
	Cover	plastic stainless		
	Hopper	12 dm <sup>3</sup> [0.4 ft <sup>3</sup> ]		23 [51]
	Motor drive	Servo motor - 800 W, 240 VAC, IP65 KCM-III requires 230 VAC single phase (US split-phase, 3 wire balanced, L1-N-L2)		
	Outlet	Horiz. (std) Vertical Pressure compensation		
	Scale		K-SFS-I scale IP65, NEMA 4	7 [15.4]

Materials:

Material contact  
parts and scale: stainless steel  
EN 1.4404 / 1.4435 (AISI 316L)  
Seals: PTFE and silicone  
Paint: Light gray RAL 7035

Weighing Range: 24 kg [52.8 lb]

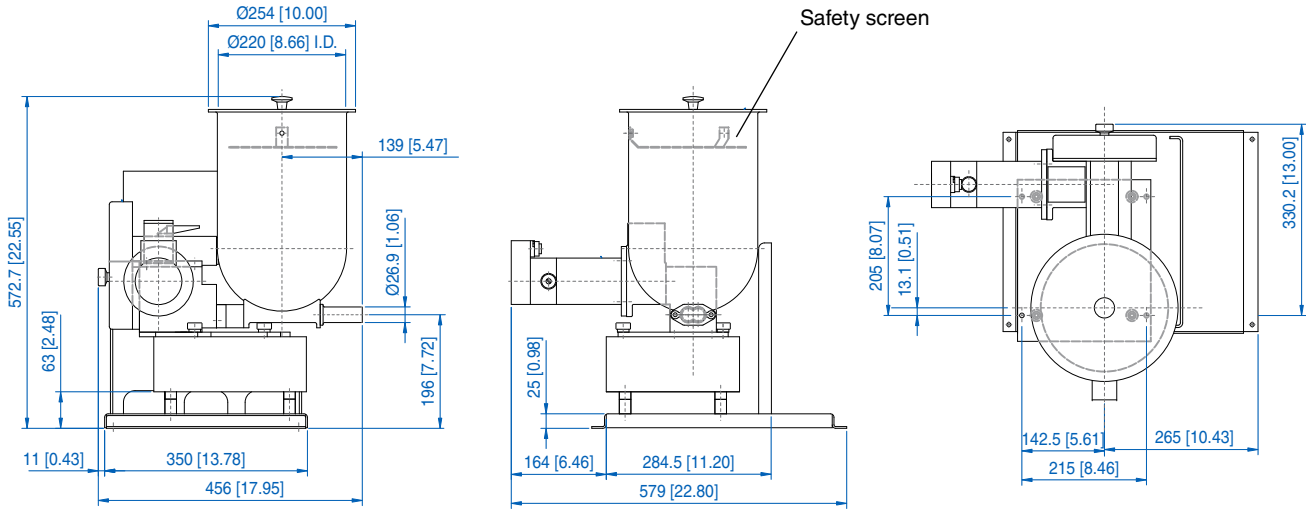
Temperature-Limits:

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

Options

- 1 Extended screws
- 2 Vertical outlet
- 3 Outlet with pressure compensation

Dimensions mm [in]



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



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