

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

Each Coperion K-Tron gravimetric feeder consists of the components A, B, C and D.
Component A is specified here.

Application

Gravimetric feeding of materials from free flowing to difficult powders (e.g. lumpy, moist or bridge building materials) as well as fibers, flakes and other bulk materials.

Design

Modular twin screw feeder with base hopper mounted on a 3-point weighing system with K-SFT load cells. A great variety of feeder screws and agitators allows accomodation of various bulk materials. All parts in contact with the material to be fed, are made of stainless steel. The modular design allows easy interchange of hopper, agitator and drive.
By opening the V-clamp on the lower end of the transition piece, the feeder will swing out for easy cleaning.
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. Interface-modules for computer communications are installed in the control module.

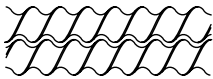
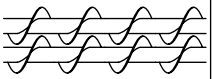
Hazardous Location Options:

- 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 (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. For feed rates at the upper or lower limits of the theoretical range, check with a Coperion K-Tron Test Lab.

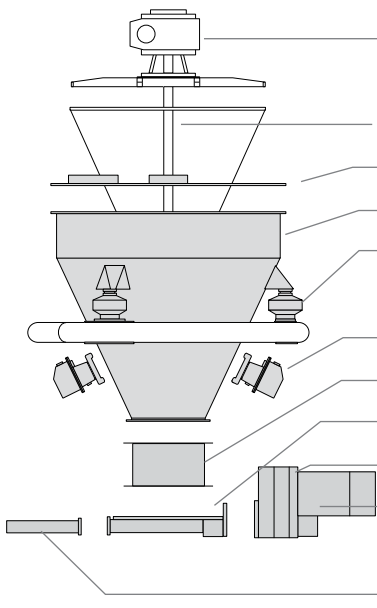
Pitch		 Twin concave screws	 Twin auger screws	Max. screw speed
coarse	dm³/h	42 - 23530	50 - 24671	909 RPM
	ft³/h	1.5 - 831	1.8 - 871	
fine	dm³/h	25 - 16246	25 - 17244	
	ft³/h	0.9 - 573	0.9 - 609	

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
Loss-in-Weight Twin Screw Feeder

K-ML-T80-10D

Configuration

Description	Alternatives	Remarks	Weight kg [lb]
 Agitator drive	EMEA/Asia: 230/400 VAC 1.5 kW, IP55Americas: 230/460 VAC 2 HP		125 [276]
Vertical agitator		option, depending on size of hopper	20-38 [44-84]
Cover			27 [60]
Base hopper		see below	
Load cells 3x K-SFT	200 kg (440 lb)300 kg (660 lb)500 kg (1100 lb)1000 kg (2200 lb)	IP65, NEMA 4 Gross weighing capacity	
2x ActiFlow		option (250L only)	19 [42]
Adapter			6 [13.2]
Feeder Base	incl. CC screws		25 [55]
Gear box			20 [44]
Motor	Servo motor - 1.6 kW, 240 VAC, IP65 KCM-III requires 230 VAC single phase (US split-phase, 3 wire balanced, L1-N-L2)		9.5 [20.9]
Outlet	Horiz. outletVertical outletPressure compensation	standard: vert. outlet	7 [15.4]

Materials:

Parts in contact
with bulk material: Stainless steel
EN 1.4404, 1.4435 (AISI 316L)

Seals: PTFE, Neoprene
Painting: Light gray RAL 7035

Weighing Range:

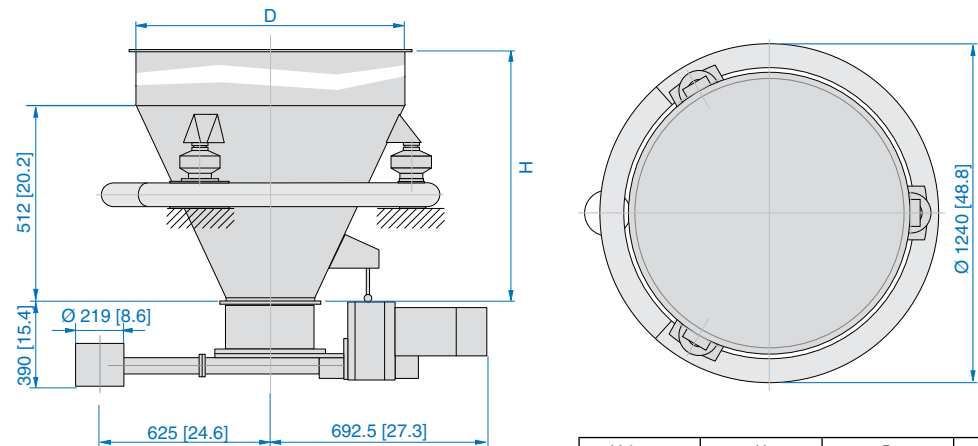
Gross weighing capacity (e.g. 3 x 60 = 180 kg) less total feeder weight
and less 10% reserve

Temperature-Limits:

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

Dimensions mm [in]

Shown with optional vertical outlet.



Volume dm³ [ft³]	H mm [in]	D mm [in]	Weight kg [lb]
Symmetrical Hoppers			
250 [9]	732 [29]	1000 [39.4]	37 [81]
450 [15]	1086 [43]	1000 [39.4]	59 [130]
750 [26]	1450 [57]	1000 [39.4]	82 [180]
1100 [39]	1820 [72]	1000 [39.4]	106 [234]
1400 [49]	2350 [93]	1000 [39.4]	140 [308]

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



www.coperion.com
All addresses: / Alle Adressen: / Toutes les adresses: I-000001

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