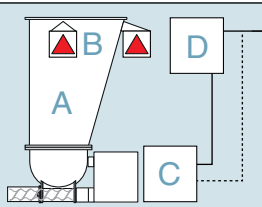


Coperion K-Tron Product Specification Loss-in-Weight Twin Screw Feeder

K-ML-KT20



- 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 all applicable European Directives (e.g. Machinery, EMC).

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:

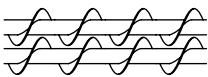
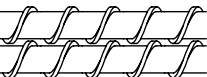
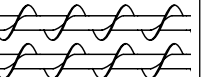
- NEC Class I, Div. 1 & 2, Group C & D
- Class II, Div. 1 & 2, Group F & G
- ATEX 3D/3D, 3D/2D, 3G/3G, 2D/2D, 2G/2G (outside/inside)



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						Max. screw speed
coarse pitch	dm³/h	0.7 - 254	1.1 - 371	0.8 - 288	0.8 - 254	746 RPM
	ft³/h	0.025 - 8.97	0.039 - 13.10	0.028 - 10.17	0.028 - 8.97	
fine pitch	dm³/h	0.4 - 138	0.3 - 112	0.5 - 185	0.6 - 202	
	ft³/h	0.014 - 4.87	0.011 - 3.95	0.018 - 6.53	0.021 - 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 Loss-in-Weight Twin Screw Feeder

K-ML-KT20

Configuration

Description	Selection	Remarks	Weight kg [lb]
Vertical agitator (option)	EMEA/Asia: 230/400 VAC 180 250 W, IP55	4D (50 L, 80 L)	25 [55]
	Americas: 230/460VAC 0.25, 0.33 HP	6D (110 L, 180 L)	36 [79]
Cover		4D	2 [4.4]
		6D	3 [6.6]
Load cells 3 x K-SFT:	30 kg 66 lb	IP65, NEMA 4 gross weighing capacity	
	60 kg 132 lb		
	90 kg 198 lb		
	120 kg 264 lb		
Extension hopper		4D or 6D	see below
ActiFlow		option (4D, 6D)	9.6 [21.6]
Horiz. agitator			0.7 [1.5]
Trough	5 L		2.5 [5.5]
Gearbox			6 [13.2]
Motor	Servo motor - 800 W, 240 VAC, IP65 KCM-III requires 230 VAC single phase (US split-phase, 3 wire balanced, L1-N-L2)		5.8 [12.8]
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

EN 1.4404, 1.4435 [AISI 316L]

EN 1.4409 [ASTM A743 CF3M]

*Horiz. agitator:

EN 1.4034 [AISI 420] standard

EN 1.4404 [AISI 316L] option

Seals:

PTFE, Neoprene, silicone

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

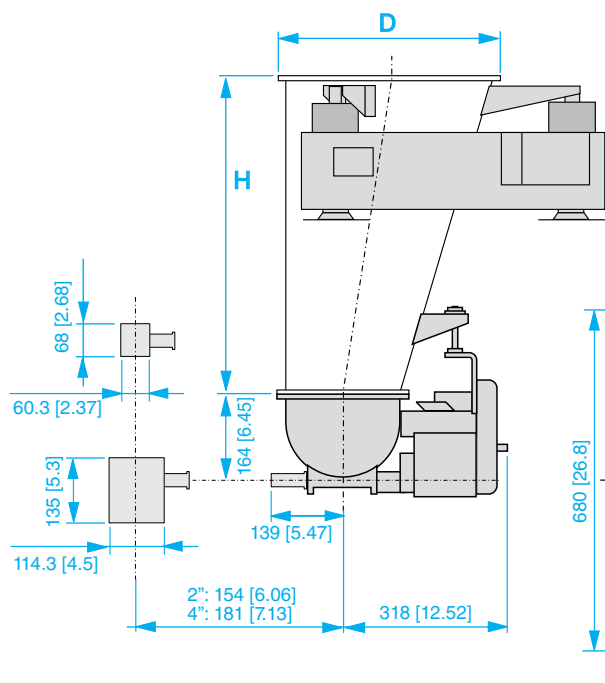
Temperature-Limits:

Ambient: 0...40°C [32...104°F]

Material: 0...50°C [32...122°F]

for other material temperatures contact factory

Dimensions mm [in]



Volume dm³ [ft³]	H mm [in]	D mm [in]	Weight kg [lb]
Asymmetrical Hoppers			
50 [1.76]	615 [24.2]	400 [15.75]	7 [15.4]
80 [2.8]	869 [34.2]	400 [15.75]	11 [24.2]
110 [3.88]	922 [36.3]	600 [23.62]	17 [37.4]
180 [6.4]	1176 [46.3]	600 [23.62]	23 [50.6]
250 [8.8]	1430 [57.2]	600 [23.62]	29.5 [64.9]
320 [11.3]	1684 [66.3]	600 [23.62]	35 [77]

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