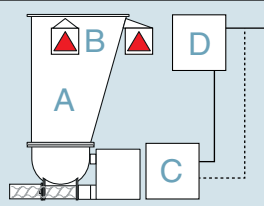


Coperion K-Tron Product Specification

Loss-in-Weight Single Screw Feeder

**K2-ML-S100
(10D)**



- 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 free flowing powders, granules and other bulk materials.

Design

Single screw feeder with interchangeable feeding tools suspended in a three-point weighing system with K-SFT load cells.

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 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 / Class II, Div. 1, Groups F & G
- Class I, Div. 2, Groups D / Class I, Div. 1, Groups D
- 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. For feed rates at the upper or lower limits of the theoretical range, check with a Coperion K-Tron Test Lab.

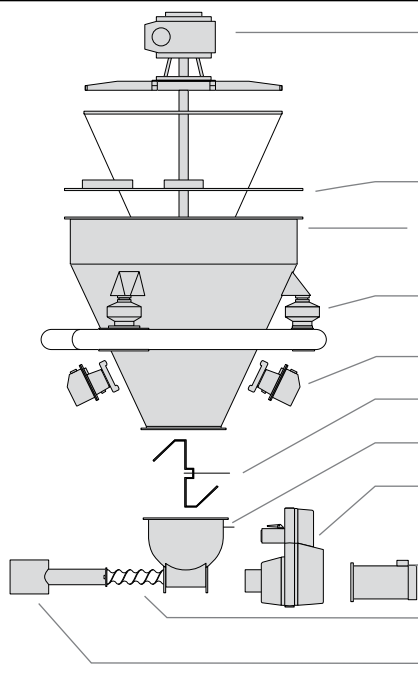
Pitch	DN	Auger screws			Spiral screws			Max. screw speed
		ø60	ø80	ø100	ø60	ø80	ø100	
Coarse	dm³/h	20 - 3474	53 - 7775	125 - 17135	23 - 3135	46 - 5946	93 - 12455	400 RPM
	ft³/h	0.7 - 123	1.9 - 274	4.4 - 605	0.8 - 111	1.6 - 210	3.3 - 440	
Fine	dm³/h	13 - 2100	29 - 4537	66 - 11126	12 - 2008	30 - 4760	65 - 9864	
	ft³/h	0.5 - 74	1 - 160	2.3 - 393	0.4 - 71	1.1 - 168	2.3 - 348	

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 Single Screw Feeder

**K2-ML-S100
(10D)**

Configuration

Configuration		Description	Alternatives				Remarks	Weight kg [lb]
	Vertical agitator		EMEA/Asia: 230/400 VAC 1.5 kW, IP55		Americas: 230/460 VAC 2 HP		option, 10D	130 [286]
	Cover						10D	27 [59]
	Extension hopper						10D	see below
	Load cells 3 x 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]
	Horiz. agitator							1.8 [4]
	Trough		15 L					7 [15.4]
	Gearbox							28 [62]
	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]
	Screws						see page 1	6 [13.2]
Outlet			Horiz. outlet	Vertical outlet	Pressure compensation		standard: horiz. outlet	5 [11]

Materials:

Product 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

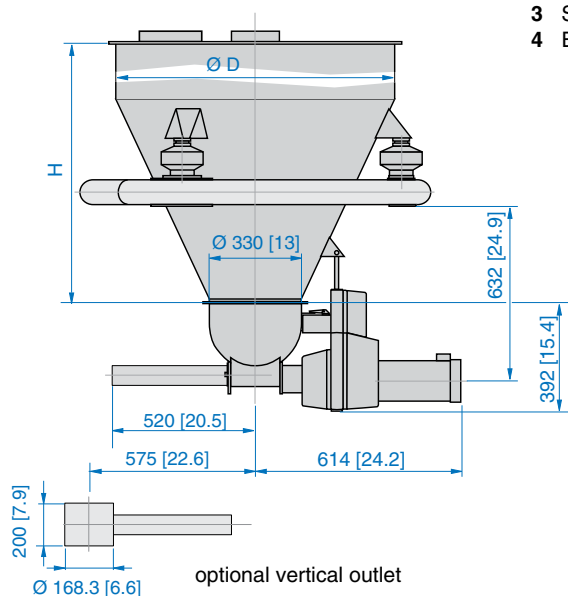
Weighing Range:

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]

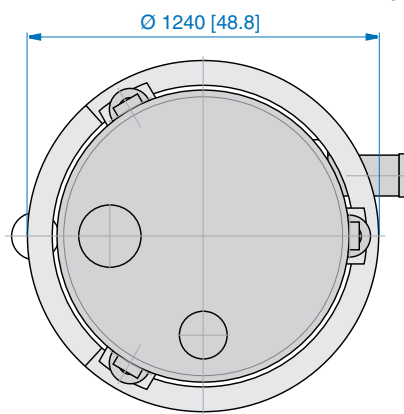


Options

- 1 Standard hopper
- 2 Vertical outlet
- 3 Special paint / finish
- 4 Extended screws

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]

6D and 16D hoppers also available



Ø Screw & Tube

60 [2.4]	70 [2.8]
80 [3.1]	89 [3.5]
100 [3.9]	114 [4.5]

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