

- 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

Gentle, gravimetric feeding of free flowing bulk materials such as granules, flakes, fibers and powders. Especially suitable for friable products, abrasive products, products with non-uniform shapes, and glass fibers.

Design

Vibratory V300 feeder with open or closed feeder tray suspended in a three-point weighing system. All parts in contact with the material being fed are stainless steel. The modular components are held together by V-clamps. This equipment conforms to all applicable European Directives (e.g. Machinery, EMC) and is also listed by an NRTL as complying with the electrical safety standard UL 61010-1.

Features

- Continuous, even mass flow with minimal pulsations
- Special quick-release clamp mechanism on the feeder tray allows for quick product changeover
- HD version includes a hygienic silicone cover to enclose the complete drive assembly
- Lower maintenance requirements due to the absence of mechanical wear parts

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.

Vibratory Drive

The Coperion K-Tron vibratory drive is part of the control system and has been developed especially for use with feeders. The electronic control system provides a quick response to changing feed and environmental conditions. Unique pendulum technology provides shock absorption only parallel to the desired direction of motion, ensuring even material flow.

Hazardous Location Options

NEC	Class II, Division 2, Groups F & G
	Class I, Division 2, Groups C & D
ATEX	3G 3D / 2D (outside/inside)

Feed Rates

The feed rate range is influenced by feeder configuration and material characteristics. The sample feed rates below were tested with a free-flowing granulate (bulk density 0.62 kg/dm³).

Attention: Actual feed rates depend on individual material characteristics. For feed rates at the upper or lower limits of the given range, check with a Coperion K-Tron Test Lab.

V300	17 – 8500 dm³/h
	0.6 – 300 ft³/h



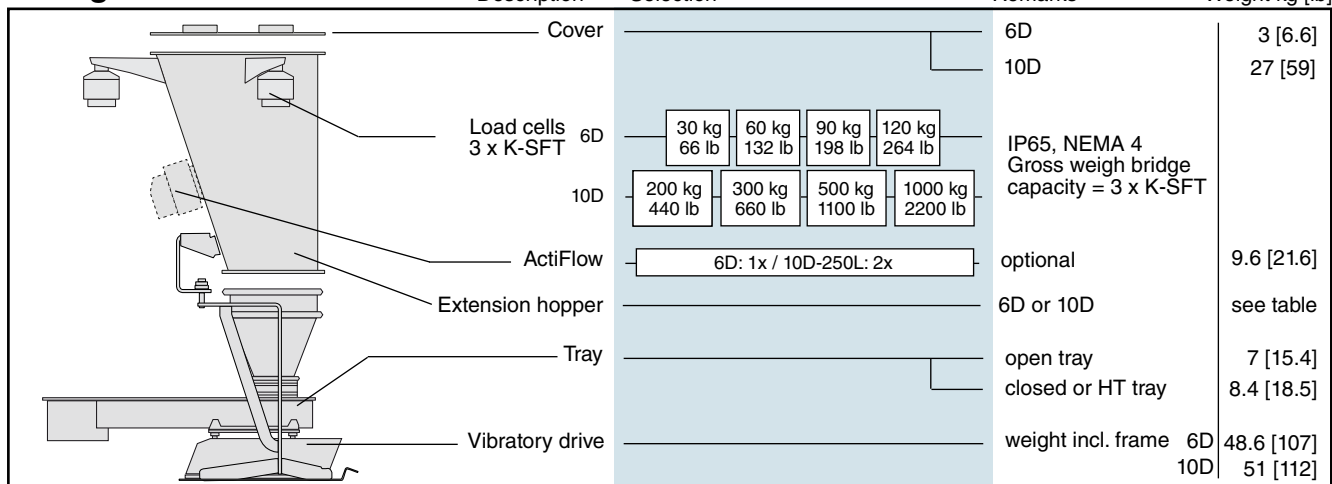
V300 vibratory feeder with open tray



V300 vibratory feeder in Hygienic Design (HD) with closed tray

K3-ML-V300
K3-HD-ML-V300

Weight kg [lb]

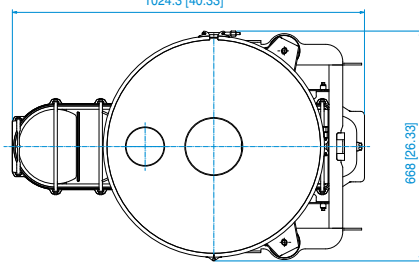


Ambient: 0...40°C [32...104°F]
 Material with closed tray: -20...60°C [-4...140°F]
 with open tray: -20...120°C [-4...248°F]
 with closed HT tray: -20...180°C [-4...356°F]

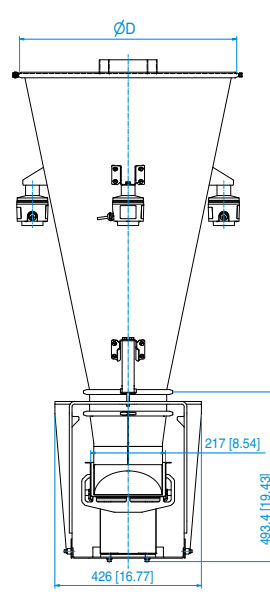
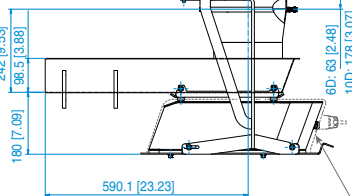
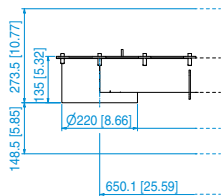
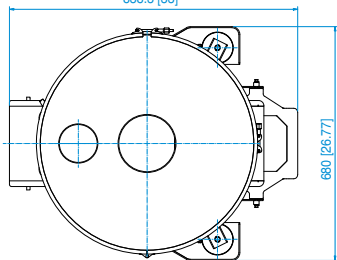
Volume dm ³ [ft ³]	H mm [in]	D mm [in]	Weight kg [lb]
Asymmetrical Hoppers <i>(shown below)</i>			
110 [3.88]	922 [36.3]	600 [23.62]	17 [37.4]
180 [6.4]	1176 [46.3]	600 [23.62]	23 [50.6]
250 [8.8]	1430 [57.2]	600 [23.62]	29.5 [64.9]
320 [11.3]	1684 [66.3]	600 [23.62]	35 [77]

Volume dm ³ [ft ³]	H mm [in]	D mm [in]	Weight kg [lb]
Symmetrical Hoppers (<i>not shown - see I-050101</i>)			
250 [9]	732 [29]	1000 [39.37]	37 [81]
450 [15]	1086 [43]	1000 [39.37]	59 [130]
750 [26]	1450 [57]	1000 [39.37]	82 [180]

1024.3 [40.33]



838.3 [33]



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