

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 V100 feeder with open or closed feeder tray mounted on an SFS platform scale. All parts in contact with the material being fed are stainless steel. The scale housing is also stainless steel and completely enclosed. 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 3D/3D, 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.

V100	1 - 500 dm³/h
	0.035 - 17.66 ft³/h



V100 vibratory feeder with open tray

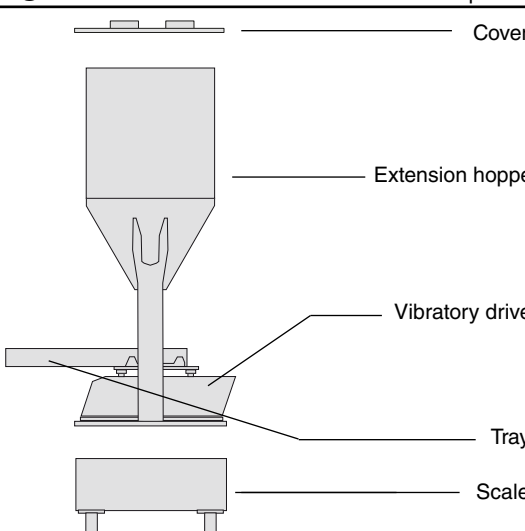


V100 vibratory feeder in Hygienic Design (HD) with closed tray

Coperion K-Tron Product Specification
Compact Loss-in-Weight Vibratory Feeder

K3-CL-SFS-V100
K3-HD-CL-SFS-V100

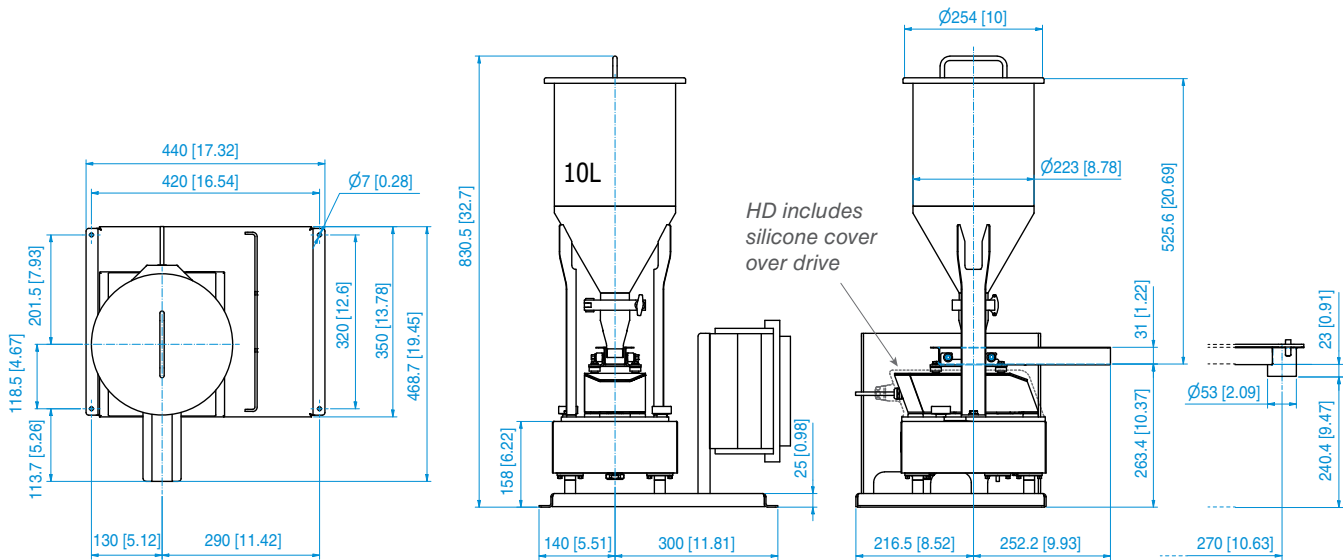
Configuration

	Description	Selection	Remarks	Weight kg [lb]
	Cover		2D	1 [2.2]
	Extension hopper	10 dm³ [0.35 ft³]		10.7 [23.5]
	Vibratory drive			
	Tray		open tray closed or HT tray	1 [2.2] 1.3 [2.9]
	Scale		K-SFS-I IP 65, NEMA 4	7 [15.4]

Technical Data

Vibratory drive:	48 VDC, 0.3 A, IP65	Weighing Range:	24 kg [52.8 lb]
Material contact parts:		Temperature-Limits:	
Stainless steel:	EN 1.4404 / 1.4435 (AISI 316L)	Ambient:	0 ... 40°C [32 ... 104°F]
Closed tray cover:	PMMA acrylic glass	Material with closed tray:	-20 ... 60°C [-4 ... 140°F]
Closed HT tray cover:	PEEK plastic	with open tray:	-20 ... 120°C [-4 ... 248°F]
Seals, gaskets:	silicone	with closed HT tray:	-20 ... 180°C [-4 ... 356°F]

Dimensions mm [in]



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