

- 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 bulk materials such as pellets and granular material. Especially suited for products that are abrasive or friable.

## Design

The vibratory feeding module – consisting of a vibrator (KV1), a closed feeder tray and a hopper – is placed on a 24 kg preloaded weigh scale. The feeder can easily be exchanged for another unit from the Compact Line.

The feeder tray, the hopper and the scale are stainless steel.

The feeder is totally maintenance-free with no mechanical parts subject to wear.

The feeding range can be pre-selected with the slide-valve.

The sanitary scale is designed for quick and easy cleaning. The scale housing is completely closed.

**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:** (see sheet I-000002)

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



## Vibratory Drive KV1

The KV1 vibratory drive is part of the control system and has been developed especially for use as a gravimetric feeder. When not in operation, the leaf spring becomes tension-free and can be easily replaced. The electronic control system provides a quick response to changing feed and environmental conditions. The control feedback signal is produced by means of a displacement sensor.

## Feeding Capacity with standard tray 30/30 mm

Density of Bulk Material	(PCF)	31	47	62
	(kg/dm³)	0.50	0.75	1.00
Feed Rate Slide Valve Open	(lb/hr)	2.2 - 275	3.3 - 407	4.4 - 550
	(kg/h)	1 - 125	1.5 - 185	2 - 250
Feed Rate Slide Valve Partially closed (15 mm)	(lb/hr)	0.22 - 96.8	0.33 - 145.2	0.44 - 187
	(kg/h)	0.1 - 44	0.15 - 66	0.2 - 85

The feed rate indications are approximate values.

**Configuration**

Description	Alternatives	Remarks	Weight kg (lb)
Cover	plastic    stainless	IP65, NEMA 4	12 (26.4)
Hopper	7 dm <sup>3</sup> (0.25 ft <sup>3</sup> )		
Tray			
Vibrator			
Outlet	Horiz. (std)    Vertical    Pressure compensation		
Weigh bridge (gross capacity)	30 kg (66 lb)		

Vibrator: 48 V; 8 W; 40-80 Hz; IP55 / NEMA 4

**Materials:**

Material contact parts and scale: stainless steel  
 DIN 1.4404 / 1.4435 (AISI 316L)  
 Seals: PTFE and Silicone  
 Paint: Light gray RAL 7035

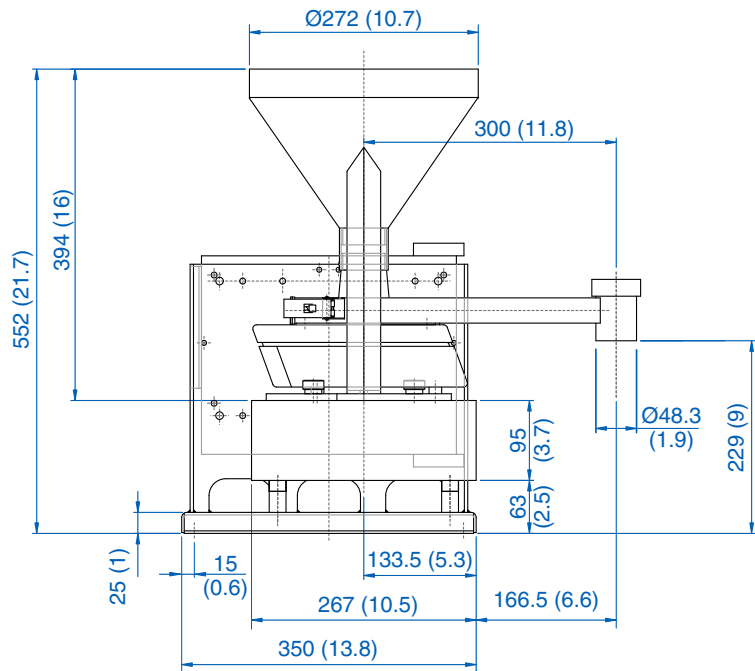
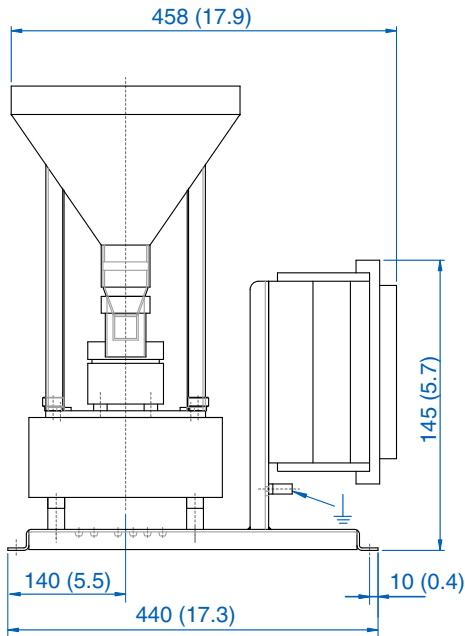
**Weighing Range:**

Gross scale capacity (30 kg) less feeder weight.

**Temperature-Limits:**

Ambient: 0 to 40°C (32 to 104°F)  
 Material: 0 to 50°C (32 to 122°F)  
*for other material temperatures contact factory*

**Dimensions** mm (in) shown with vertical outlet



**Options**

- 1 Vertical outlet
- 2 Outlet with pressure compensation

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