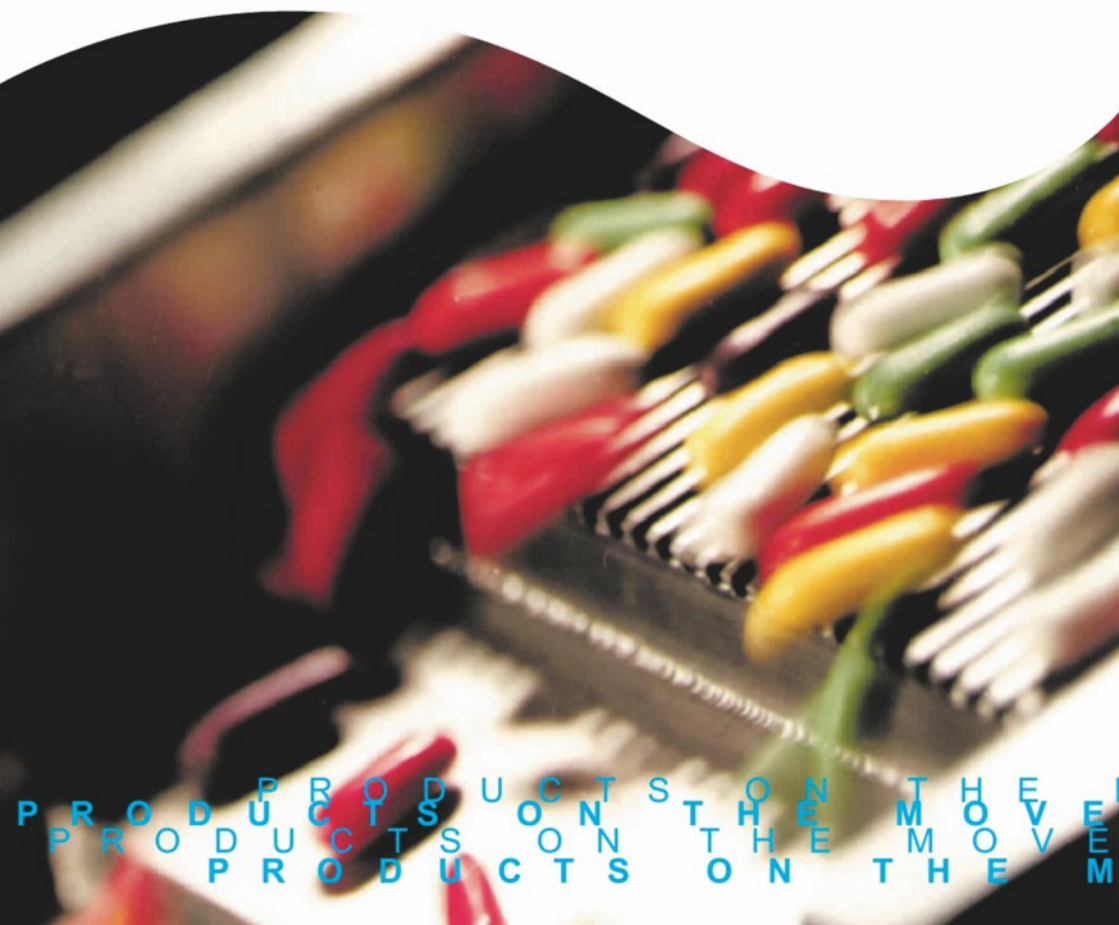




Linear Vibratory Feeders & Hopper Vibrators



PRODUCTS ON THE MOVE
PRODUCTS ON THE MOVE
PRODUCTS ON THE MOVE

Introduction

Riley Automation, established for over 50 years, designs and manufactures a comprehensive and diverse range of parts handling and linear vibratory systems.

Our innovative solutions are used in a wide variety of application for food, pharmaceutical, confectionery, packaging, electrical, electronics, automotive and associated manufacturing and process industries.

At our purpose built head quarters in Derby, we manufacture under license from the FMC corporation in the USA, a company whose SYNTRON® materials handling equipment is well known throughout the world.

As part of our ongoing commitment to quality, Riley provide customers with a comprehensive spares and aftersales service.

FMC syntron®



- *Totally enclosed trough with spigot inlet and outlet*



- *Tubular feeder for transfer of grain*



- *Trough hopper metering product into vibratory bowl feeder*

- *Bulk hopper discharging confectionery product onto pre-feeder and then to three output troughs, each independently adjustable for amplitude and product bed depth*





• *Live plate feeder for cross transfer of glass containers*



• *Typical screening feeder with product landing deck and wedge wire screen*



• *Laned distribution of snack food product*

Application Solutions

No matter whether the product is hot or cold; fine or coarse; damp or dry; heavy or light, Riley Linear Vibratory Feeders operate across a broad spectrum of industry from chemicals to construction and from pharmaceuticals to food.

Batching, Weighing and Bagging, Packaging, Grinding, Mixing, Raking, Freezing and Drying these are just some of the applications worldwide to which thousands of Riley feeders are making a valuable contribution.

Experienced Riley Automation applications engineers can suggest precisely how these sophisticated products can improve the performance of your plant and make a real and lasting impact on your profitability.



• *Scarf cut linear feeder giving uniform product distribution across process conveyor*

The Riley Range of Linear Vibratory Feeders

The Riley range of Linear Vibratory Feeders is among the most comprehensive available. Combining flexibility with high performance, these rugged, highly specified units are rated for continuous operational duty.

Riley feeders have no cams, bearings or eccentric activators. They need no lubrication and they provide the ideal low- maintenance solution to feeder problems arising from sustained processes.

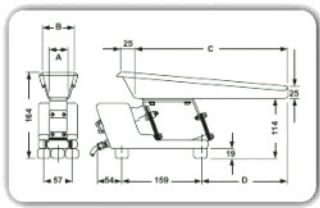
The drive units are dustproof; leaf springs are manufactured from resin impregnated non-corroding fibre and the operating coils are fully encapsulated to give long and reliable service. The BF Series are rated to IP66 standard.

The more powerful units in the range incorporate instantaneous cut-off features which makes them especially suitable for very precise weighing and process applications.

Seven robust models, F-TO-B to BF-3 cover the range from 460kg/hour to 11tonnes/hour



F-TO-B



F-TO-B

CAPACITY	460KG/hour ON SAND AT 1600kg/m³	
VOLTAGE	230v	110v
CURRENT	0.18 AMPS	0.36 AMPS
FREQUENCY	50 Hz or 60 Hz SINGLE PHASE	
WEIGHT	NET	SHIPPING
kgs	4.5	11
Maximum Trough Weight - 1.6kg		

Dimensions (mm)

A	B	C	D
50	75	250	136
40	66	300	186
50	75	300	186

F-T01

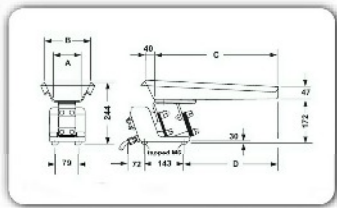
CAPACITY	2 TONNES/HOUR ON SAND AT 1600kg/m³	
VOLTAGE	230v	110v
CURRENT	0.4 AMPS	0.8 AMPS
FREQUENCY	50Hz or 60Hz SINGLE PHASE	
WEIGHT	NET	SHIPPING
kgs	11.5	17
Maximum Trough Weight - 2.7kg		

Dimensions (mm)

A	B	C	D
150	220	300	187.5
100	170	450	334.5
75	145	450	334.5



F-T01



F-010/FH-010

CAPACITY	3.5/4 TONNES/HOUR	
	ON SAND AT 1600kg/m ³	
VOLTAGE	230v	110v
CURRENT	1/1.25 AMPS	2/2.5 AMPS
FREQUENCY	50Hz or 60Hz	
	SINGLE PHASE	
WEIGHT	NET	SHIPPING
	kgs	
	15	20

Maximum Trough Weight - F010 5.5kg

F-010 Dimensions (mm)

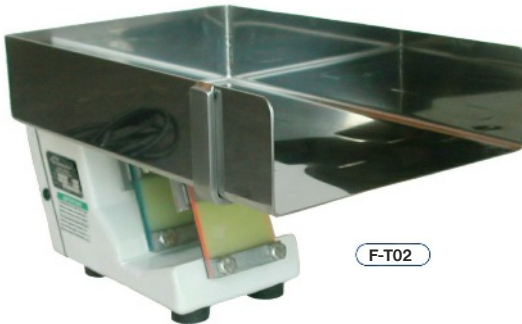
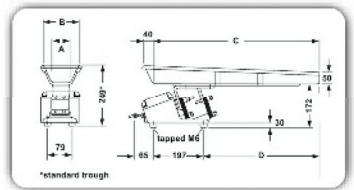
A	B	C	D
200	270	450	320
150	220	500	345
100	170	670	470

FH-010 Dimensions (mm)

A	B	C	D
200	270	500	345
150	320	500	345



F-010/FH-010



F-T02

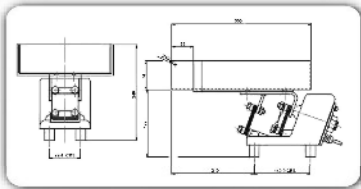
F-T02

CAPACITY	8 TONNES/HOUR	
	ON SAND AT 1600kg/m ³	
VOLTAGE	230v	110v
CURRENT	0.75 AMPS	1.5 AMPS
FREQUENCY	50Hz or 60Hz	
	SINGLE PHASE	
WEIGHT	NET	SHIPPING
	kgs	
	19	24

Maximum Trough Weight - 5 kg

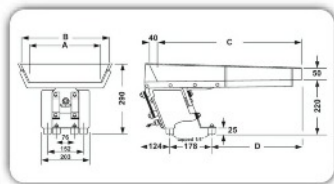
F-T02 Dimensions (mm)

A	B	C	D
150	320	450	340
235	-	355	210





BF-2-HS



CAPACITY	10 TONNES/HOUR ON SAND AT 1600kg/m³	
VOLTAGE	230v	110v
CURRENT	2.0 AMPS	4.0 AMPS
FREQUENCY	50Hz or 60Hz SINGLE PHASE	
WEIGHT	NET	SHIPPING
kgs	30	38

Maximum Trough Weight - 10kg

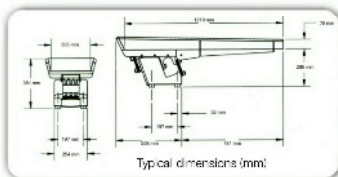
Dimensions (mm)			
A	B	C	D
200	270	762	465
250	320	762	465
300	370	600	385



BF-3

BF-3		
CAPACITY	Adjustable stroke up to 2mm Max speed 50m/min	
VOLTAGE	240v	110v
CURRENT	3.5 AMPS	7 AMPS
FREQUENCY	50Hz or 60Hz SINGLE PHASE	
WEIGHT	NET	SHIPPING
kgs	68	72

Maximum Trough Weight on application



Peripheral Discharge Feeder



Feeding product to multihead weigher

Totally Enclosed Feeder



Feeding salt to bagging machine

Vibratory Screening Feeder



Removing particles from good product

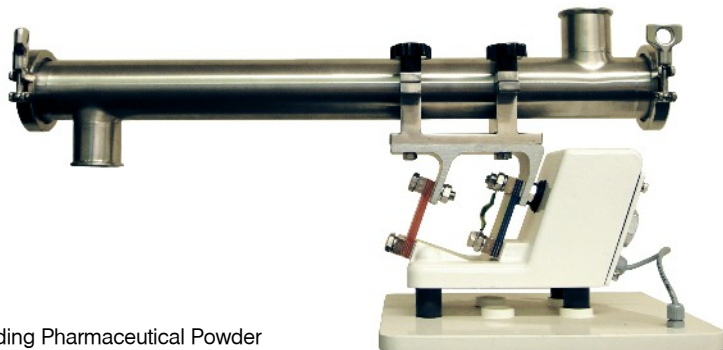
Storeveyor and Vibratory Feeder



Feeding confection onto elevator

PRODUCTS ON THE MOVE
PRODUCTS ON THE MOVE
PRODUCTS ON THE MOVE

Quick Release Tubular Feeder



Feeding Pharmaceutical Powder

Scarf Cut Feeder



Spreading Product onto Client Belt

Hopper Vibrators

V180/181

The Riley SYNTRON® range of electromagnetic vibrators is among the most diverse in Western Europe. It meets the widespread demand for the vibration of hoppers and chutes. Rated for continuous operational duty, these units provide the ideal low-maintenance solution to problems arising from sustained processes.

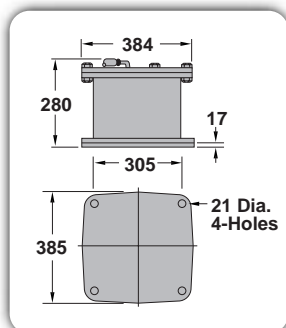
From the small, high-frequency units to the huge V180 which is capable of vibrating a bunker or hopper of 50 tonnes capacity each SYNTRON® unit is manufactured to the highest material and performance specifications. There are cushioned impact units available for those applications where noise levels are carefully monitored.



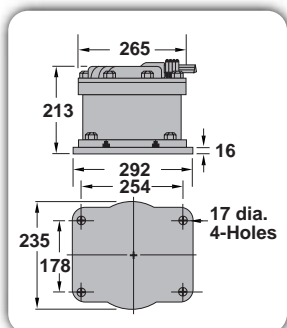
V50/51

V41

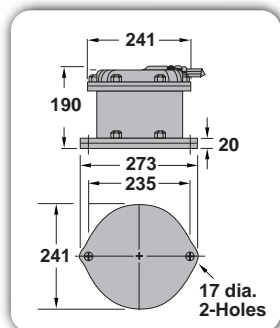
V180/181



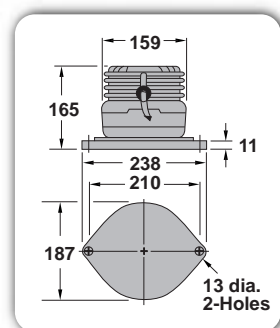
V85/86



V50/51



V41



NOT SHOWN

SPECIFICATIONS

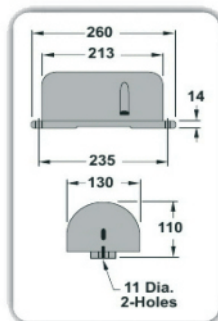
	V180/181	V85/86	V50/51	V41	V20	V9	V4	V2
Vibrations per minute	3000	3000	3000	3000	3000	3000	6000	6000
Voltage (to be specified)	110 or 230	110 or 230	110 or 230	110 or 230	110 or 230	110 or 230	110 or 230	110 or 230
Input amps.	6	3.5	2.25	1.75	1	0.6	0.4	0.15
Net Weight Vibrator	100kg	36kg	20kg	12kg	6.4kg	4kg	2kg	1.2kg
Net Weight Controller	15kg	8kg	0.6kg	0.6kg	0.6kg	0.6kg	0.6kg	0.6kg

APPLICATION TABLE

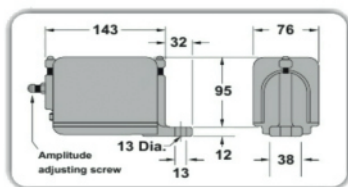
Vibrator	Wall Thickness mm	Approx Capacity in Tapered Portion of Bin
V180	10	1 per 45 tonne
V181	8	1 per 27 tonne
V85	8	1 per 18 tonne
V86	6	1 per 4.5 tonne
V50	6	1 per 4.5 tonne
V51	3.25	0.8m ³
V41	3.25	0.6m ³
V20	1.5	0.08m ³
V4	0.8	0.03m ³
V2	0.65	0.03m ³



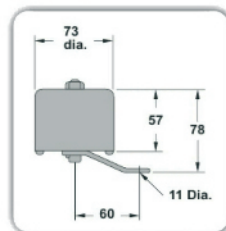
V20



V4

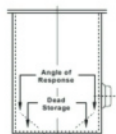


V2

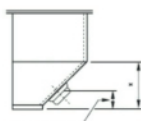


Installation Data

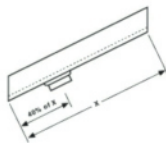
(Mounting Plate may be required)



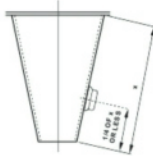
RECTANGULAR & CYLINDRICAL BINS WITH FLAT BOTTOM CENTRE DISCHARGE



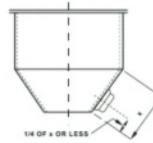
HOPPERS WITH VERTICAL SIDES



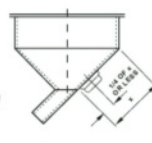
INCLINED CHUTE



CONICAL & RECTANGULAR HOPPERS



RECTANGULAR BINS WITH SLOPING DISCHARGE



HOPPERS WITH SLOPING DISCHARGE

Vibrating Tables

Vibratory principles can be applied to tables and other flat surfaces to achieve significant packaging economies. Most materials respond to carefully chosen vibration amplitudes by settling and compacting sufficiently to allow significantly more product to be placed in each pack. Smaller containers can be used for a given volume, or the net weight capacity of the container can be increased.

The Riley SYNTRON® Electromagnetic Vibrating Tables combine high-speed vibration with a carefully controlled low amplitude that does not exceed 1.6mm vertical movement. This gentle action results in the particles being settled in such a way that air voids are virtually eliminated, and the compacting action is almost instantaneous.

Apart from their widespread use in filling drums and other containers, these tables are used extensively for vibrating moulds and forms to eliminate air voids. They also prepare sheets of paper in bulk for printing and finishing and for presentation to high-speed automated document handling machines.

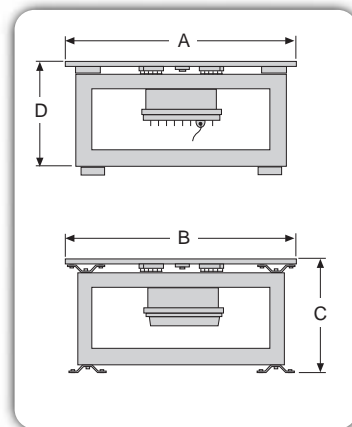
The smallest and quietest packer is the VP20 and the most common applications are the settling and packing of coffee, powdered milk and pharmaceuticals in bottles, tins and other small containers. A larger, more powerful model - the cushioned VP51 - is used to settle cement, chemicals and plastic granules in drums and the packing of rivets, whilst the VP86 heavy duty packer is suitable for packing and settling dry bulk materials such as refractories, chemicals and food in drums, barrels and cases.

For pharmaceutical and dental applications Riley Automation have a specific range of vibrating tables. For paper and cheque handling applications a range of paper joggles are available.



Vibrating Tables				
Type	Deck Size mm	Capacity kg	Amps at 230 Volts	Shipping Weight
VP 20	350 x 350	25	1.0	67.00Kg
VP 50	515 x 515	136	2.5	86.36Kg
VP 51	515 x 515	136	3.5	86.36Kg
VP 85	760 x 760	227	3.5	202.27Kg
VP 86	760 x 760	227	3.5	202.27Kg

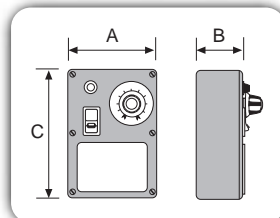
Dimensions (mm)				
Type	A	B	C	D
VP 20	350	350	156	141
VP 50	508	508	254	219
VP 51	508	508	254	219
VP 85	762	762	384	349
VP 86	762	762	384	349



SCR1 - Controller

SCR 1 - Controller Dimensions

A	B	C
120	56	188



Riley Automation



Call today for a copy of our latest Automated Parts Handling brochure which features the Riley range of vibratory bowl feeders, hopper and elevator loading equipment and component counting and bagging systems.

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