

Syntron® vibra drive units

Syntron® Vibra Drive Units provide directional vibratory conveying movement to a track, trough or any responsive surface. They are designed for use with packaging machines or special process equipment requiring a metered flow of bulk materials or parts.

Vibra drive units are small, compact, electromagnetic drives encased in dust-tight housings. The mounting bracket has pre-drilled holes for easy attachment to the mass to be vibrated. Drive type and number of drives is determined by the width, length and the weight of the mass to be vibrated.

Below-deck, base mounting is standard for all units. Controls are available to operate a single-drive unit or multiple-drive configurations.

Vibra Drive Units operate from either 115 or 230 volt, single- phase, 50 or 60 cycle power. Models BF-2, BF-3, BF-4 and BF-4 LF vibra drive units also operate from 460 volt; all other units require a step-down transformer when operating voltage is 460 volt.

Syntron Vibra Drives are designed for easy adjustment, including external tuning on most models.



Syntron vibra drives are used by many different industries. Here, an F-T01 drive in a parts handling application.



Custom designed sandwiching processes rely on Syntron drives to ensure consistent, controlled delivery and smooth, gentle cookie, wafer or cracker handling.

Syntron vibra drive units are isolated from the surrounding building and supports by rubber mountings for most models. Three types of rubber mountings are available. The BF-4 drive features sandwich mounts. The F-T02, BF-4 LF and the Velocity® RS drives feature coil springs.

Available Rubber Mountings

Dimensions in inches

	No. 1 Standard Cushion		No. 2 Sandwich Type		No. 3 Special Double Stud		
	A	B	A	B	A	B	C
F-T0	1	11/16	1	3/4	1	3/4	3/4
F-T01	1	1/4	1	5/16	1	5/16	3/4
F-010	1	3/16	1	1/4	1	1/4	3/4
F-T02 ■	1 1/4	5/16	1 1/4	9/16	1 1/4	5/16	3/4
HV-10	1 1/4	3/4	1 1/4	1	1 1/4	3/4	3/4
BF-01	1	11/16	1	3/4	1	3/4	3/4
BF-2	1 1/4	3/4	1 1/4	1	1 1/4	3/4	3/4
BF-3*	1 9/16	17/32	1 9/16	17/32	1 9/16	17/32	5/8

Standard rubber mounts are solid rubber (no metal inserts or studs on bottom).

■ F-T02 comes standard with coil spring mounts. Dimension A = 1¹⁵/₆₄; Dimension B = 1¹/₁₆.

* All BF-3 Isolators are 5/16-18 thread.

Syntron® vibra drive units, cont'd.

IP66

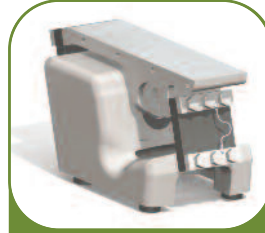
BF-Series Vibra Drives



Model BF-01 will handle a 12 pound mass with up to .060 stroke.



Model BF-2 will handle a 20 pound mass with up to .090 stroke.



Model BF-3 will handle a 40 pound mass with up to .090 stroke.



Model BF-4 will handle a 90 pound mass with up to .090 stroke.



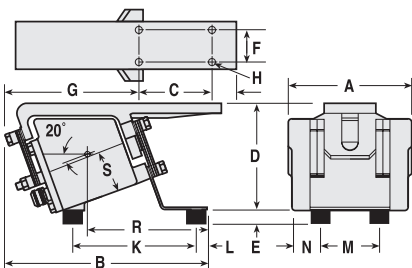
Model BF-4 LF drive will handle up to 110 pound mass with up to .120 stroke.

Drive Dimensions (inches, mm)

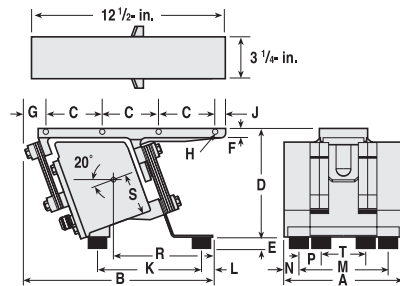
Model		A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T
BF-01	(in)	6 ⁹ / ₁₆	10 ³ / ₄	3 ³ / ₄	5 ¹¹ / ₁₆	1 ¹¹ / ₁₆ ●	1 ³ / ₄	7 ¹ / ₄	1 ¹¹ / ₃₂ dia	1/2	6 ⁹ / ₁₆	9/16	3 ¹ / ₈	1 ²³ / ₃₂	-	6 ³ / ₄	2 ¹ / ₄	-
	(mm)	167	273	95	144	17	44	184	9	13	167	14	79	44	-	171	57	-
BF-2	(in)	8	12 ⁵ / ₈	4	7 ⁵ / ₁₆	3/4 ●	5/16	1 ¹ / ₄	5/16 -18 *	5/16	7	3/4	6	1	1 ¹ / ₂	7 ¹ / ₄	2 ³ / ₄	3
	(mm)	203	321	102	178	19	8	32	-	8	178	19	152	25	38	184	70	76
BF-3	(in)	10	17 ¹ / ₈	4	9 ²¹ / ₃₂	1 ¹⁷ / ₃₂	1	4	1/2 -13 *	1 ¹¹ / ₁₆	7 ¹ / ₂	1 ³ / ₁₆	7 ³ / ₄	1 ¹ / ₈	-	6 ¹⁹ / ₃₂	4 ¹⁵ / ₁₆	-
	(mm)	254	43	102	245	14	25	102	-	17	191	30	197	29	-	167	125	-
BF-4	(in)	11 ¹ / ₈	24 ⁴⁵ / ₆₄	4 ³ / ₄	11 ¹ / ₆₄	1 ⁵ / ₈	3/4	4 ²⁷ / ₆₄	1/2 -13 *	2 ³⁹ / ₆₄	13	1 ⁵ / ₁₆	5	3 ¹ / ₁₆	-	8 ⁹ / ₃₂	-	-
	(mm)	283	628	121	280	41	19	112	-	66	330	33	127	78	-	210	-	-
BF-4 LF	(in)	20 ¹ / ₂ ◆	26 ◆	4 ³ / ₄	8 ³ / ₄	4 ⁵ / ₈ ▲	3/4	4 ²⁷ / ₆₄	1/2 -13 *	2 ³⁹ / ₆₄	21 ²¹ / ₃₂ ◆	2 ¹ / ₄ ◆	16 ◆	2 ¹ / ₄	7	3 ¹³ / ₁₆ ◆	-	-
	(mm)	521	660	121	221	117	19	112	-	66	550	57	407	57	178	97	-	-

- Height E depends upon rubber mounting selected. See Available Rubber Mountings chart on page 16.
- Center of mass—this point should coincide with the center of trough mass at a 20° working angle.
- * Has 4 holes, drilled and tapped, on each side of mounting plate.
- ◆ BF-4 LF drive features radially-adjustable isolation mounts. Dimensions given are suggested locations of isolation mounts.
- ▲ Height dimension E varies with trough weight.

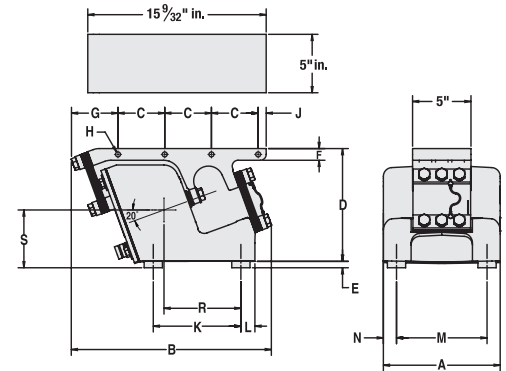
Model BF-01



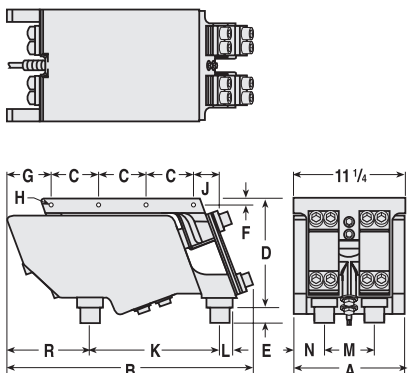
Model BF-2



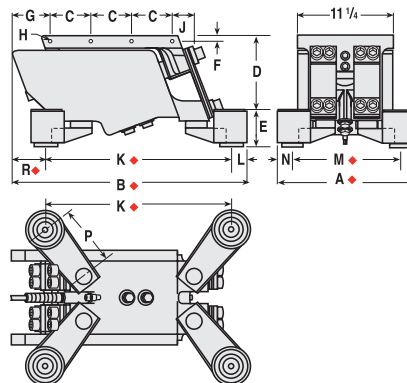
Model BF-3



Model BF-4



Model BF-4 Low Frequency



Specifications

	Model BF-01	Model BF-2	Model BF-3	Model BF-4	Model BF-4 LF
Approx. Power Consumption	50 Watts	80 Watts	-	-	-
Approx. Current Input	2.3 amps★	4.5 amps	10.0 amps	18.0 amps▼	9.0 amps□
Approx. Net Weight, Drive	30 lb	67 lb	133 lb	310 lb	345 lb

- ★ Unit can be ordered to operate from virtually any commercial power supply up to 230 volts. A step-down transformer is required when operating voltage is 460 volts. Please specify the voltage required and either 50 or 60 Hz at time of order.
- ▼ 18 amps @ 115 V 50 or 60 Hz; 11 amps @ 208 V 60 Hz; 9 amps @ 220/230 V 60 Hz or 220/240 V 50 Hz; 4.5 amps @ 440/460/480 V 60 Hz or 380 V 50 Hz; 3.5 amps @ 575 V 60 Hz.
- 9.0 amps @ 230 V 50-60 Hz; 4.5 amps @ 460 V 60 Hz or 380 V 50 Hz.

HV-10 Feeder Drive

Suitable for a Wide Range of Applications:

- Trough Weight 4-12 lb.
- CSA Certified
- Wide Range of Input Voltage
- Stable Footprint
- IP-66
- 50/60 Hz Design
- Low Profile Design

Great for Use in Food Processing and Packaging:

- Low Product Degradation
- Wash Down Capable
- Single Tool Air Gap Adjustment
- Multiple Mounting Configurations
- Linear Speed Control
- Sanitary Design
- Uniform Material Flow at Discharge
- Open Magnet Design
- Super Resonant Tuning



Drive Dimensions (inches, mm)

Model	A	B	C	D	E	F	G	H	J	K	L	M	N
HV-10	6 ⁷ / ₈	14 ⁷ / ₈	3 ³ / ₄	5 ⁷ / ₁₆	1/4	1 ³ / ₄	11 ¹ / ₁₆	11 ¹ / ₃₂	3/4	9 ¹ / ₄	3 ⁵ / ₁₆	5 ¹ / ₄	4 ¹ / ₂
	175	378	95	138	6	44	281	9	19	235	84	133	114

Feature	Benefit
IP-66	Great for use in Clean In Place environments
Open Design	Easy to Integrate and Setup
Interchangeable Trough	Can Interchange with any FT-01, FT-02, F-010 and BF-01 for immediate increased capacity
Uniform Material Flow	Great for use in sorting, blending and coating
Extreme Travel Speed	Double capacity compared to most feeders
Low Vertical Acceleration	Low Degradation to Fragile Material

Part Numbers 6501-060-[Voltage Code] [Frequency Code] [Mounting Code]
Eg. 6501-060-16N - 115V /60HZ, Standard Rubber Feet

Voltage Code	Frequency Code	Mounting Code
1 - 115 Volt	5 - 50HZ	N - Standard Rubber Foot
2 - 220/230 Volt	6 - 60HZ	M - 1/4-20 Male Thread *
3 - 380 Volt		F - 1/4-20 Female Thread *
4 - 460 Volt		C - Coil Spring Feet **

*Add 1/4" to overall height
 **Add 3/4" to overall height

HV-10 Feeder Drive

