

**Syntron®
Light Industry
Feeders**



Syntron Material Handling

Look to Syntron Material Handling for exceptional value and performance in bulk material handling. For over 80 years, we've partnered with our customers to solve material handling requirements in the most demanding and diverse industries and applications. Proven, low-maintenance and built to last, our Syntron® line – backed by our expert team of engineers and application specialists – sets the standard for quality, performance and reliability.

Syntron Material Handling is committed to complete customer satisfaction, with fast, efficient solutions for most bulk handling applications. From state-of-the-art electronic data capabilities, to expert sales and engineering support specialists, we're focused on ensuring a smooth design, production and installation process – from start to finish. Once you're up and running, our customer service and field service teams are on call for technical service and support.

Syntron®

Light Industry Feeders

Versatile, efficient feeding solutions for a broad range of processing applications from the most common to the most challenging bulk materials. Syntron® Light Industry Feeders are on the job around the world, around the clock, maximizing productivity with proven, reliable feeding solutions.

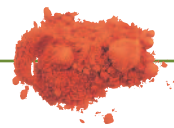
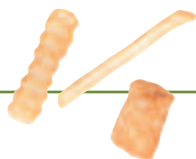
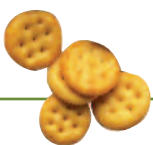




table of contents

Syntron® light industry
vibrating feeders

4

feeder models and
specifications

6

standard and special
trough styles

14

Syntron® vibra drive units

16

Syntron® feeder controls
and systems

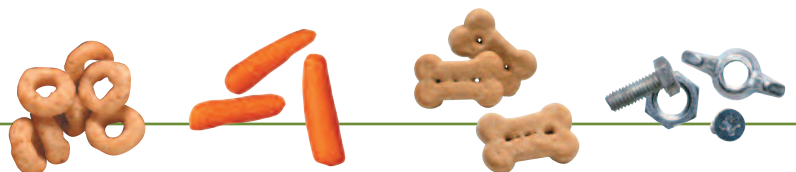
20

Syntron® volumetric
feeder machines

22

volumetric feeder machine
models and specifications

24





feeding

The controlled flow of materials from bulk storage or from one process to another to achieve optimum efficiency.



Syntron® Vibrating Feeders for Light Industry

Ideal for metering bulk material flow in feeding, mixing and packaging operations.

Syntron® Vibrating Feeders for light industry offer unmatched flexibility and reliability, making them ideally suited for a number of applications and materials. They are typically used in feeding, mixing, blending, batching, grinding, packaging, flaking, freezing and drying applications. Whether the material is hot or cold, fine or coarse, dry or damp, light or heavy, these versatile units handle it with ease and efficiency.

With over 80 years of performance-proven history, Syntron feeders are well known for their outstanding performance in bulk material handling. Syntron feeders are subresonantly tuned to maintain stroke consistency and speed stability, thus delivering higher capacities at controlled feed rates. Other standard features include robust design, tuneability, and the capability to work consistently under varying headloads.

Syntron Vibrating Feeders feature electromagnetic design, offering excellent durability and reliability. With no mechanical parts to wear out or require lubrication, downtime and maintenance are extremely rare, even under difficult or abusive environmental conditions.

Capacities range from 1,250 pounds to 25 tons per hour, based on granular material weighing 100 pounds per cubic foot, and are configured for high-speed tuning to handle special applications. Low-frequency models operate at 1,800 vpm and offer higher amplitude. All other models operate at 3,600 cycles per minute on a 60 Hz power supply. All Syntron feeder models conform to OSHA noise standards and can be provided in accordance with FDA or USDA specifications for use in the food, pharmaceutical and cosmetic industries. Feeder solutions for heavy material loads are also available.

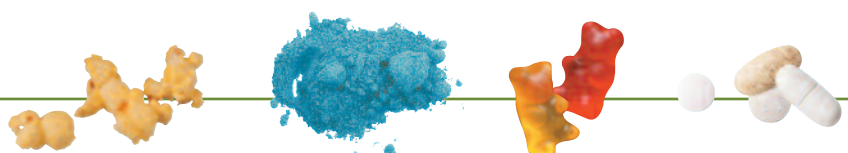
Material flow is easily adjusted with a Syntron control. A wide range of standard and special control arrangements is available to meet specific handling requirements.



Syntron Model BF-2 Feeders feed potato chips from a modular distribution system to weigh scales in a typical snack food packaging application.



Ideal for controlling bulk material in mixing, blending, batching, grinding and packaging operations, the ten standard Light Industry Electromagnetic Vibrating Feeder models operate with maximum capacities ranging from 1,250 pounds to 25 tons per hour, based on material weighing 100 pounds per cubic foot.



F-Series Feeders

Syntron® F-Series Feeders are designed for robust feeding, high head loads, stability and tuneability. These little feeders deliver big performance.

Model F-T0

Syntron® FT-0 feeder with standard 1-1/2 x 12-inch trough has a maximum capacity of 1,250 pounds per hour. This dependable feeder is ideal for applications demanding top performance at budget prices. Common applications include metering small quantities of dry materials or conveying small parts.

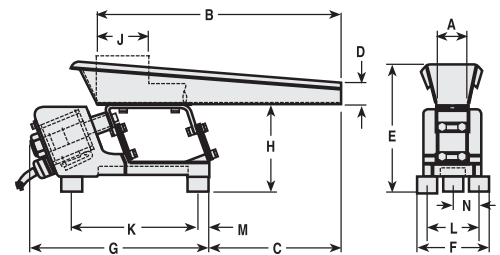
Trough Type		A	B	C	D	E	F	G	H •	J	K	L	M	N
Std. Flat Pan	(in)	1 1/2	12	6 3/8	1	6 3/8	3	9 1/2	4 3/8	-	6 1/4	2 1/4	1/2	1 1/8
	(mm)	38	305	162	25	162	76	241	111	-	159	57	13	29
Spec. Flat Pan	(in)	2	8	2 7/8	1	6 3/8	3	9 1/2	4 3/8	-	6 1/4	2 1/4	1/2	1 1/8
	(mm)	51	203	73	25	162	76	241	111	-	159	57	13	29
Spec. V-Shape	(in)	-	12	6 3/8	1 1/8	5 1/2	3	9 1/2	4 3/8	-	6 1/4	2 1/4	1/2	1 1/8
	(mm)	-	305	162	29	140	76	241	111	-	159	57	13	29
Spec. Tubular	(in)	1 dia	12	6 3/8	-	5 3/4	3	9 1/2	4 3/8	1 3/4 sq	6 1/4	2 1/4	1/2	1 1/8
	(mm)	25	305	162	-	146	76	241	111	44	159	57	13	29

Feed Rate ■ : 1250 lb per hour
 Current Input * : 115 V 60 cycle @ 0.35 amps

Approx Net Weight Feeder: 10-1/2 lb
 Control Selection: Pages 20-21
 Approx Shipping Weight Feeder and Control: 28 lb



Syntron F-T0 Feeder



Model F-T01

Syntron F-T01 feeder with standard 3 x 18-inch flat pan trough has a maximum capacity of two tons per hour. Wider troughs handle larger capacities.

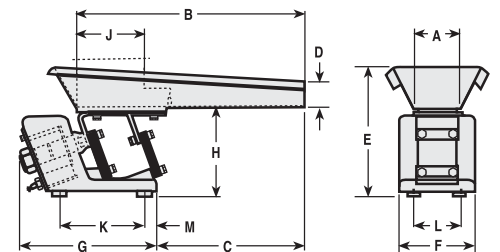
Trough Type		A	B	C	D	E	F	G	H •	J	K	L	M
Std. Flat Pan	(in)	3	18	12 5/8	1 3/4	8 5/8	5	9 1/8	5 7/8	-	5 5/8	3 1/8	13/16
	(mm)	76	457	321	44	219	127	232	149	-	143	79	21
Spec. Flat Pan	(in)	4	18	12 5/8	1 3/4	8 5/8	5	9 1/8	5 7/8	-	5 5/8	3 1/8	13/16
	(mm)	102	457	321	44	219	127	232	149	-	143	79	21
Spec. Flat Pan	(in)	6	12	6 5/8	1 1/4	8 3/8	5	9 1/8	5 7/8	-	5 5/8	3 1/8	13/16
	(mm)	152	305	168	32	213	127	232	149	-	143	79	21
Spec. V-Shape	(in)	-	18	12 5/8	2	8 7/8	5	9 1/8	5 7/8	-	5 5/8	3 1/8	13/16
	(mm)	-	457	321	51	225	127	232	149	-	143	79	21
Spec. Tubular	(in)	3 dia	18	12 5/8	-	9 7/8	5	9 1/8	5 7/8	6	5 5/8	3 1/8	13/16
	(mm)	76	457	321	-	251	127	232	149	152	143	79	21

Feed Rate ■ : 2 tons per hour
 Current Input * : 115 V 60 cycle @ .9 amps

Approx Net Weight Feeder: 33 lb
 Control Selection: Pages 20-21
 Approx Shipping Weight Feeder and Control: 50 lb



Syntron F-T01 Feeder



- Feed rate based upon granular material weighing 100 pounds per cubic foot and feeder with standard flat pan.
- Height H with standard cushion rubber mount. For other mounting options, see Available Rubber Mountings chart on page 16.
- * 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.

Model F-T02

The Syntron® F-T02 feeder comes with all the standard features and benefits you've come to rely on from Syntron light capacity feeders, **PLUS** a higher stroke (.090 inches) that yields twice the travel speed of other Syntron units. The F-T02 is ideal for a whole range of applications, including high-stroke scale feeding, hard to feed materials, and traditional bulk feeding from hoppers. The Syntron F-T02 feeder with standard 6 x 18-inch flat pan trough has a maximum capacity of ten tons per hour. ■ Wider troughs handle larger capacities.



Syntron F-T02 Feeder

Trough Type	A	B	C	D	E	F	G	H •	J	K	L	M	
Std. Flat Pan	(in)	6	18	12 5/8	2	9 11/16	5	10 1/2	6 3/4	-	5 5/8	3 1/8	13 1/16
	(mm)	152	457	321	51	246	127	267	171	-	143	79	21

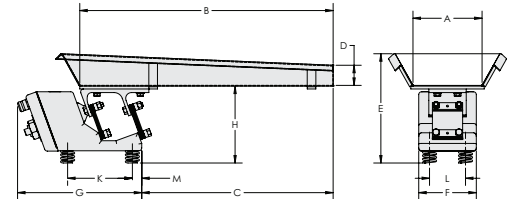
Feed Rate ■ : 10 tons per hour

Current Input * : 115 V 60 cycle @ 1.5 amps

Approx Net Weight Feeder: 42 lb

Control Selection: Pages 20-21

Approx Shipping Weight Feeder and Control: 65 lb



- Feed rate based upon granular material weighing 100 pounds per cubic foot and feeder with standard flat pan.
- Height E and H with standard coil spring mount. For other mounting options, see Available Rubber Mountings chart on page 16.
- * 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.
- ▲ Other trough sizes are available. Contact the factory for assistance.

Model F-010

Syntron® F-010 feeder with standard 5 x 20-inch trough has a maximum capacity of four tons per hour. ■



Syntron F-010 Feeder

Trough Type	A	B	C	D	E	F	G	H •	J	K	L	M	
Std. Flat Pan	(in)	5	20	13	2	9	6	11 5/16	6	-	7 3/4	3 1/8	1
	(mm)	127	508	330	51	229	152	287	152	-	197	79	25
Spec. Flat Pan	(in)	5	24	15	2	9	6	11 5/16	6	-	7 3/4	3 1/8	1
	(mm)	127	610	381	51	229	152	287	152	-	197	79	25
Spec. Flat Pan	(in)	6	18	12	2	9	6	11 5/16	6	-	7 3/4	3 1/8	1
	(mm)	152	457	305	51	229	152	287	152	-	197	79	25
Spec. Tubular	(in)	3 dia	18	12	-	10	6	11 5/16	6	6 sq	7 3/4	3 1/8	1
	(mm)	76	457	305	-	254	152	287	152	152	197	79	25

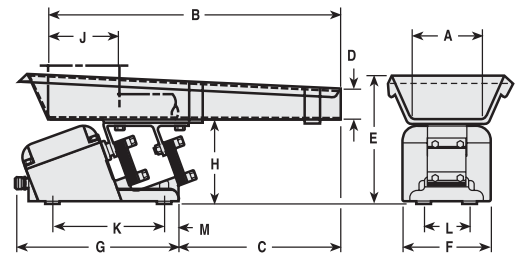
Feed Rate ■ : 4 tons per hour

Current Input: 115 V 60 cycle @ 2.0 amps

Approx Net Weight Feeder: 41-1/2 lb

Control Selection: Pages 20-21

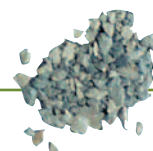
Approx Shipping Weight Feeder and Control: 65 lb



- Feed rate based upon granular material weighing 100 pounds per cubic foot and feeder with standard flat pan.
- Height H with standard cushion rubber mount. For other mounting options, see Available Rubber Mountings chart on page 16.
- * 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.

The actual capacity of all Syntron Vibrating Feeders varies according to the density of the bulk material being handled and the feeder trough size.

Syntron feeders can be furnished with above-trough drives if required; base mounting is the most common arrangement on light industry feeders.



feeder models and specifications, cont'd.

Model F-152

With a capacity of 12 tons per hour, the Syntron® F-152 feeder carries heavier troughs and greater head loads than smaller models such as model BF-2. This unit is commonly used in blending, mixing and packaging operations in industries such as glass and plastic applications. Base or suspension mounting is available, and above-deck drives are an option.

Below-Deck Drive

Trough Type		A	B	C	D	E	F	G	H	J	K	L	M
Std. Flat Pan	(in)	10	36	5 1/2	2 1/2	15 3/4	8 1/8	16 1/8	11 3/4	19 3/8	29 3/8	14 3/4	13 1/2
	(mm)	254	914	140	64	400	206	410	298	492	746	375	343
Spec. Flat Pan	(in)	6	42	2 1/2	2 1/2	15 3/4	8 1/8	19 1/8	11 3/4	19 3/8	26 3/8	10 3/4	12
	(mm)	152	1067	64	64	400	206	486	298	492	670	273	305
Spec. Flat Pan	(in)	8	36	5 1/2	2 1/2	15 3/4	8 1/8	16 1/8	11 3/4	19 3/8	29 3/8	12 3/4	13 1/2
	(mm)	203	914	140	64	400	206	410	298	492	746	324	343
Spec. Flat Pan	(in)	12	30	8 1/2	2 1/2	15 3/4	8 1/8	13 1/8	11 3/4	19 3/8	29 3/8	16 3/4	15
	(mm)	305	762	216	64	400	206	333	298	492	746	425	381
Spec. Tubular	(in)	3 dia.	36	2 1/8	3	14 1/2	8 1/8	16 1/8	10 1/2	16	22 7/8	-	12
	(mm)	76	914	54	76	368	206	410	267	406	581	-	305
Spec. Tubular	(in)	4 dia.	24	8 1/8	4	15 1/2	8 1/8	10 1/8	10 1/2	16	22 1/8	-	12
	(mm)	102	610	206	102	394	206	257	267	406	562	-	305
Spec. Tubular	(in)	6 dia.	18	11 1/8	6	17 1/2	8 1/8	7 1/8	10 1/2	16	20 7/8	-	12
	(mm)	152	457	283	152	445	206	181	267	406	530	-	305

Above-Deck Drive

Trough Type		A	B	C	D	E	F	G	H	J	K	L
Spec. Flat Pan	(in)	6	24	8 1/4	32 1/4	14 1/2	4	21 1/2	7	14	12	10 3/4
	(mm)	152	610	210	819	368	102	546	178	356	305	273
Spec. Flat Pan	(in)	6	36	1 1/8	39 7/8	14	4	25	7	14	12	10 3/4
	(mm)	152	914	29	1013	356	102	635	178	356	305	273
Spec. Flat Pan	(in)	8	16	13 3/8	32 1/8	15	5	19 5/8	7	14	12	12 3/4
	(mm)	203	406	340	816	381	127	498	178	356	305	324
Spec. Flat Pan	(in)	8	24	8 1/4	35	14 1/2	4	21 1/2	7	14	12	12 3/4
	(mm)	203	610	210	889	368	102	546	178	356	305	324
Spec. Flat Pan	(in)	8	36	1 1/8	39 7/8	14	4	25	7	14	12	12 3/4
	(mm)	203	914	29	1013	356	102	635	178	356	305	324
Spec. Flat Pan	(in)	10	16	12 1/4	31	14 1/2	4 1/2	18 1/2	7	14	12	14 7/8
	(mm)	254	406	311	787	368	114	470	178	356	305	378
Spec. Flat Pan	(in)	10	24	8 1/4	35	14 1/2	4 1/2	21 1/2	7	14	12	14 3/4
	(mm)	254	610	210	889	368	114	546	178	356	305	368
Spec. Flat Pan	(in)	12	24	8 1/4	35	14 1/2	4 5/8	21 1/2	7	14	12	16 3/4
	(mm)	305	610	210	889	368	117	546	178	356	305	425
Spec. Flat Pan	(in)	14	16	12 1/2	31	14 1/2	4	18 1/2	7	14	12	18 3/4
	(mm)	356	406	318	787	368	104	470	178	356	305	476

Feed Rate ■ : 12 tons per hour

Approx. Current Input * :115 volt, 60 cycle, 2.5 amps

Approx. Net Weight, Feeder: 95 lb

Control Selection: Pages 20-21

Approx. Ship. Weight, Feeder and Control: 140 lb

■ Feed rate based upon granular material weighing 100 pounds per cubic foot and feeder with standard flat pan.

* Unit can be ordered to operate from virtually any commercial power supply up to 575 volts. Please specify the voltage required and either 50 or 60 Hz at time of order.

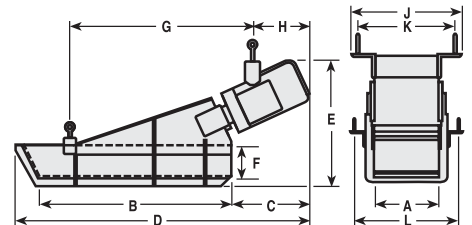
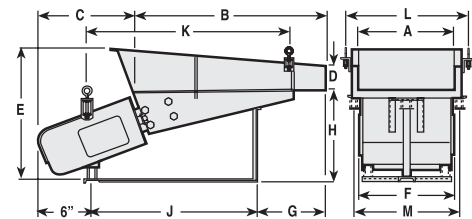
▲ Other trough sizes are available. Contact the factory for assistance.

The actual capacity of all Syntron Vibrating Feeders will vary according to the density of the bulk material being handled and the feeder trough size.

Syntron feeders can be furnished with above-trough drives if required; base mounting is the most common arrangement on light industry feeders. Both base and suspension mounting configurations are available for models F-152 and F-212.



Syntron F-152 Feeder



Model F-212

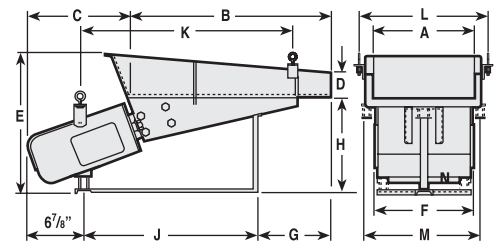
Syntron® F-212 feeder offers the same design features as model F-152, but with a maximum capacity of 20 tons per hour. ■ This proven, rugged unit is ideal for heavy-duty applications. Model F-212 can be supplied with either base or suspension mounting. Above-deck drives are an option.



Syntron F-212 Feeder

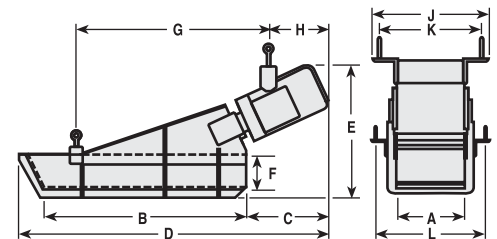
Below-Deck Drive

Trough Type		A	B	C	D	E	F	G	H	J	K	L	M
Std. Flat Pan	(in)	12	36	8 3/8	3	17 5/8	12	17 1/4	12 5/8	20 1/4	26 1/2	16 3/4	15
	(mm)	305	914	213	76	448	305	438	321	514	673	425	381
Spec. Flat Pan	(in)	8	42	2 3/8	3	17 5/8	12	20 1/4	12 5/8	20 1/4	26 1/2	12 3/4	15
	(mm)	203	1067	60	76	448	305	514	321	514	673	324	381
Spec. Flat Pan	(in)	16	30	11 3/8	3	17 5/8	12	14 1/4	12 5/8	20 1/4	27	20 3/4	15
	(mm)	406	762	289	76	448	305	362	321	514	686	527	381
Spec. Flat Pan	(in)	18	24	14 3/8	3	17 5/8	12	11 1/4	12 5/8	20 1/4	27	22 3/4	15
	(mm)	457	610	365	76	448	305	286	321	514	686	578	381
Spec. Tubular	(in)	10 dia.	24	12	10	23 3/4	12	8 7/8	11 3/4	20 1/4	25 1/2	-	15
	(mm)	254	610	305	254	603	305	225	298	514	648	-	381
Spec. Tubular	(in)	8 dia.	30	9	8	21 3/4	12	11 7/8	11 3/4	20 1/4	24 1/2	-	15
	(mm)	203	762	229	203	552	305	302	298	514	622	-	381
Spec. Tubular	(in)	6 dia.	36	6	6	19 3/4	12	14 7/8	11 3/4	20 1/4	20 1/2	-	15
	(mm)	152	914	152	152	502	305	378	298	514	521	-	381
Spec. Tubular	(in)	4 dia.	42	5 3/8	4	18 5/8	12	14 3/4	12 5/28	25 3/4	23 1/2	-	15
	(mm)	102	1067	137	102	473	305	375	292	654	597	-	381



Above-Deck Drive

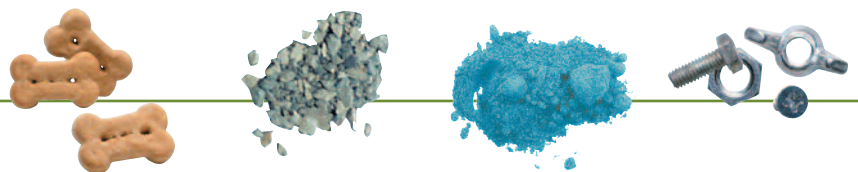
Trough Type		A	B	C	D	E	F	G	H	J	K	L
Spec. Flat Pan	(in)	8	36	9	45	18	5 1/2	32 1/4	8 1/4	15	12	13
	(mm)	203	914	229	1143	457	140	819	210	381	305	330
Spec. Flat Pan	(in)	10	30	12	45	18	5 1/2	29 1/4	8 1/4	15	12	15
	(mm)	254	762	305	1143	457	140	743	210	381	305	381
Spec. Flat Pan	(in)	10	36	9	48	18	5 1/2	32 1/4	8 1/4	15	12	15
	(mm)	254	914	229	1219	457	140	819	210	381	305	381
Spec. Flat Pan	(in)	12	24	15	42	18	5 1/2	26	8 3/8	15	12	17
	(mm)	305	610	381	1067	457	140	650	213	381	305	432
Spec. Flat Pan	(in)	12	30	12	45	18	5 1/2	30 1/4	8 1/4	15	12	17 1/8
	(mm)	305	762	305	1143	457	140	768	210	381	305	435
Spec. Flat Pan	(in)	12	36	9	48	18	5 1/2	32 1/4	8 1/4	15	12	17 1/8
	(mm)	305	914	229	1219	457	140	819	210	381	305	435
Spec. Flat Pan	(in)	16	24	15	42	18	5 1/2	26 1/4	8 1/4	15	12	21
	(mm)	406	610	381	1067	457	140	667	210	381	305	553



Feed Rate ■ : 20 tons per hour
Approx. Current Input * :115 volt, 60 cycle, 4.5 amps

Approx. Net Weight, Feeder: 170 lb
Control Selection: Pages 20-21
Approx. Ship. Weight, Feeder and Control: 265 lb

- Feed rate based upon granular material weighing 100 pounds per cubic foot and feeder with standard flat pan.
- * Unit can be ordered to operate from virtually any commercial power supply up to 575 volts. Please specify the voltage required and either 50 or 60 Hz at time of order.
- ▲ Other trough sizes are available. Contact the factory for assistance.

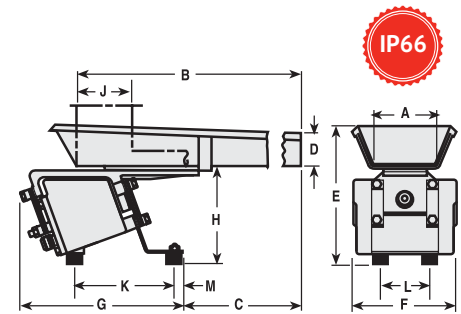


BF-Series Feeders

Model BF-01

Syntron® BF-01 feeder gives you maximum feed control through instantaneous material flow cutoff. Rated at a maximum capacity of 5 tons per hour, when equipped with standard 6 x 24-inch trough. Since the electromagnetic drive has an IP66 Rating, it can be cleaned with steam or water without damaging the electrical components.

Trough Type		A	B	C	D	E	F	G	H •	J	K	L	M
Std. Flat Pan	(in)	6	24	15 5/16	2	9 11/16	6 9/16	10 3/4	6 11/16	-	6 9/16	3 1/8	9/16
	(mm)	152	610	389	51	246	167	273	170	-	167	79	14
Spec. Flat Pan	(in)	5	20	13 5/16	2	9 11/16	6 9/16	10 3/4	6 11/16	-	6 9/16	3 1/8	9/16
	(mm)	127	508	338	51	246	167	273	170	-	167	79	14
Spec. Flat Pan	(in)	8	20	13 5/16	2	10 11/16	6 9/16	10 3/4	7 11/16	-	6 9/16	3 1/8	9/16
	(mm)	203	508	338	51	271	167	273	195	-	167	79	14
Spec. Flat Pan	(in)	10	20	13 5/16	2	10 11/16	6 9/16	10 3/4	7 11/16	-	6 9/16	3 1/8	9/16
	(mm)	254	508	338	51	271	167	273	195	-	167	79	14
Spec. Flat Pan	(in)	12	14	9 1/16	2	10 11/16	6 9/16	10 3/4	7 11/16	-	6 9/16	3 1/8	9/16
	(mm)	305	356	230	51	271	167	273	195	-	167	79	14
Spec. Tubular	(in)	3 dia	24	15 5/16	-	10 5/8	6 9/16	10 3/4	6 5/8	7 sq	6 9/16	3 1/8	9/16
	(mm)	76	610	389	-	270	167	273	168	178	167	79	14
Spec. Tubular	(in)	4 dia	20	9 13/16	-	11 5/8	6 9/16	10 3/4	6 5/8	8 sq	6 9/16	3 1/8	9/16
	(mm)	102	508	249	-	295	167	273	168	203	167	79	14



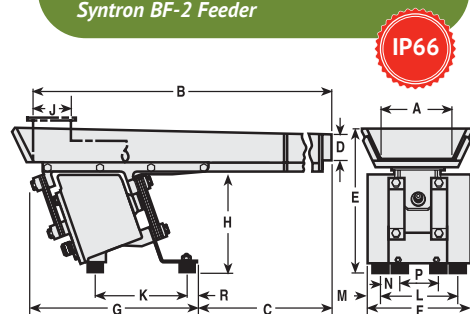
Feed Rate ■ : 5 tons per hour
Current Input: 115 V 60 cycle @ 2.3 amps

Approx Net Weight Feeder: 35 lb
Control Selection: Pages 20-21
Approx Shipping Weight Feeder and Control: 60 lb

Model BF-2

Syntron® BF-2 feeder offers the same innovative features as the smaller model BF-01, but with a higher feeding capacity of 9 1/2 tons per hour. ■

Trough Type		A	B	C	D	E	F	G	H •	J	K	L	M	N	P	R
Std. Flat Pan	(in)	8	30	17 5/8	2	11 3/8	8	12 5/8	7 5/16	-	7	6	1	1 1/2	3	3 3/4
	(mm)	203	762	448	51	289	203	321	186	-	178	152	25	38	76	119
Spec. Flat Pan	(in)	10	30	17 5/8	2	11 3/8	8	12 5/8	7 5/16	-	7	6	1	1 1/2	3	3 3/4
	(mm)	254	762	448	51	289	203	321	186	-	178	152	25	38	76	119
Spec. Flat Pan	(in)	12	24	14 5/8	2	11 3/8	8	12 5/8	7 5/16	-	7	6	1	1 1/2	3	3 3/4
	(mm)	305	610	371	51	289	203	321	186	-	178	152	25	38	76	119
Spec. Flat Pan	(in)	14	24	14 5/8	2	11 3/8	8	12 5/8	7 5/16	-	7	6	1	1 1/2	3	3 3/4
	(mm)	356	610	371	51	289	203	321	186	-	178	152	25	38	76	119
Spec. Tubular	(in)	3 dia.	30	17 5/8	-	12 3/8	8	12 5/8	7 5/16	8 sq.	7	6	1	1 1/2	3	3 3/4
	(mm)	76	762	448	-	314	203	321	186	203	178	152	25	38	76	119
Spec. Tubular	(in)	4 dia.	24	14 5/8	-	13 3/8	8	12 5/8	7 5/16	8 sq.	7	6	1	1 1/2	3	3 3/4
	(mm)	102	610	371	-	340	203	321	186	203	178	152	25	38	76	119
Spec. Tubular	(in)	6 dia.	18	11 5/8	-	15 3/8	8	12 5/8	7 5/16	9 sq.	7	6	1	1 1/2	3	3 3/4
	(mm)	152	457	295	-	391	203	321	186	229	178	152	25	38	76	119



Feed Rate ■ : 9 1/2 tons per hour
Approx. Current Input * : 115 volt, 60 cycle 4.0 amps

Approx. Net Weight, Feeder: 90 lb
Control Selection: Pages 20-21
Approx. Ship. Weight, Feeder and Control: 100 lb

- Feed rate based upon granular material weighing 100 pounds per cubic foot and feeder with standard flat pan.
- Height H with standard cushion rubber mount. For other mounting options, see Available Rubber Mountings chart on page 16.
- * Unit can be ordered to operate from virtually any commercial power supply up to 460 volts. Please specify the voltage required and either 50 or 60 Hz at time of order.
- ▲ Other trough sizes are available. Contact the factory for assistance.

Model BF-3

The Syntron® BF-3 feeder is an exciting new addition to Syntron Material Handling's existing line of products by offering a single drive solution for larger trough sizes. The BF-3 utilizes a sealed, sanitary design capable of handling a diverse range of feeding applications while providing solutions for industries such as food, pharmaceutical, material handling and packaging.

Trough Type		A	B	C	D	E	F	G	H •	J	K	L
Std. Flat Pan	(in)	12	42	28 ^{15/16}	4	16 ^{5/16}	10	16 ^{1/16}	11 ^{5/16}	7 ^{1/2}	7 ^{3/4}	1 ^{3/16}
	(mm)	305	1,067	735	102	414	254	408	287	191	197	30
Spec. Flat Pan	(in)	8	48	31 ^{15/16}	4	16 ^{5/16}	10	19 ^{1/16}	11 ^{5/16}	7 ^{1/2}	7 ^{3/4}	1 ^{3/16}
	(mm)	203	1,219	811	102	414	254	484	287	191	197	30
Spec. Flat Pan	(in)	10	48	31 ^{15/16}	4	16 ^{5/16}	10	19 ^{1/16}	11 ^{5/16}	7 ^{1/2}	7 ^{3/4}	1 ^{3/16}
	(mm)	254	1,219	811	102	414	254	484	287	191	197	30
Spec. Flat Pan	(in)	10	38	24 ^{15/16}	4	16 ^{5/16}	10	16 ^{1/16}	11 ^{5/16}	7 ^{1/2}	7 ^{3/4}	1 ^{3/16}
	(mm)	254	965	633	102	414	254	408	287	191	197	30
Spec. Flat Pan	(in)	12	48	31 ^{15/16}	4	16 ^{5/16}	10	19 ^{1/16}	11 ^{5/16}	7 ^{1/2}	7 ^{3/4}	1 ^{3/16}
	(mm)	305	1,219	811	102	414	254	484	287	191	197	30
Spec. Flat Pan	(in)	14	30	21 ^{15/16}	4	16 ^{5/16}	10	15 ^{15/16}	11 ^{5/16}	7 ^{1/2}	7 ^{3/4}	1 ^{3/16}
	(mm)	356	762	557	102	414	254	405	287	191	197	30
Spec. Flat Pan	(in)	16	30	12 ^{15/16}	4	16 ^{5/16}	10	15 ^{15/16}	11 ^{5/16}	7 ^{1/2}	7 ^{3/4}	1 ^{3/16}
	(mm)	406	762	329	102	414	254	405	287	191	197	30

Feed Rate ■ : 25 tons per hour

Approx Net Weight Feeder: 150 lb

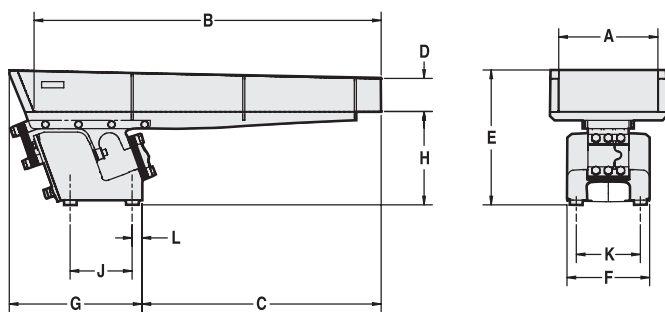
Current Input*: 115 V 60 cycle @ 10 amps

Approx Shipping Weight Feeder and Control: 180 lb

■ Feed rate based upon granular material weighing 100 pounds per cubic foot and feeder with standard flat pan.

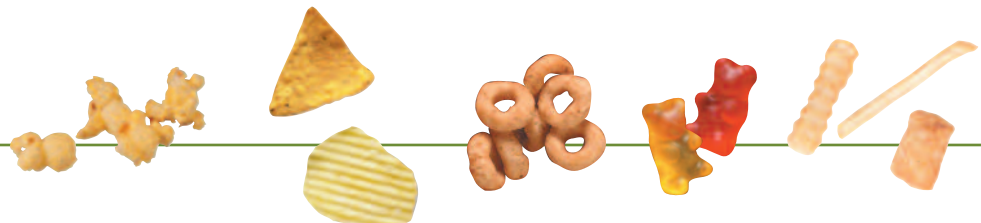
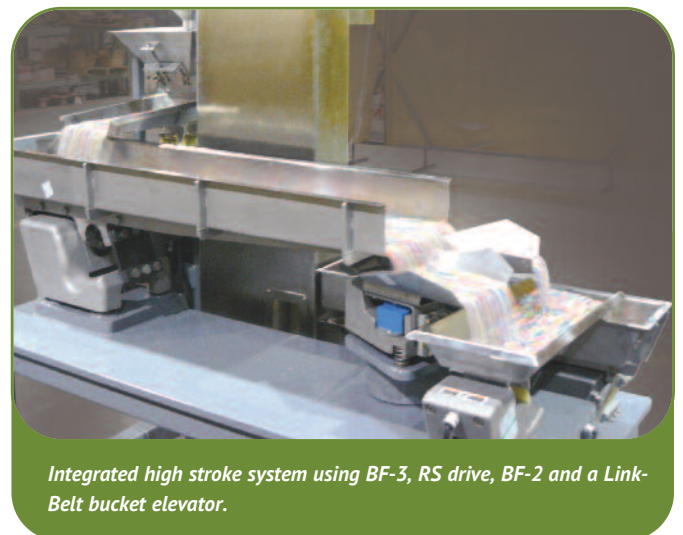
* Unit can be ordered to operate from virtually any commercial power supply up to 575 volts. Please specify the voltage required and either 50 or 60 Hz at time of order. Contact the factory for assistance.

▲ Other trough sizes are available. Contact the factory for assistance.



Features

- Designed for high speed feeding up to 60 ft per minute ■
- Sanitary design eliminates contamination during washdown
- Drive design is IP 66 compliant
- CSA Approved and CE Incorporable
- Feeder capable of operating at .090" stroke with a trough carrying weight ranging from 20 to 40 pounds
- Other trough sizes available – contact the factory for assistance
- Externally adjustable tuning



feeder models and specifications cont'd.



Model BF-4

BF-4 feeders can achieve product travel speeds up to 50 feet (15 meters) per minute. Continuous welds on stainless steel troughs provide extra sanitation for food and pharmaceutical applications.

Features

- Long trough overhang for optimum feeder positioning minimizes product drop and degradation
- Electromagnetic drive allows adjustable vibration control and gentle product handling
- Product travel speeds up to 50 fpm (15 mpm)
- Adjustable stroke—up to .150 inches (4 mm)—maintains feed rate of difficult-to-handle or sticky products
- Continuous welds on stainless steel troughs provide extra sanitation in FDA applications

The actual capacity of all Syntron Vibrating Feeders varies according to the density of the bulk material being handled and the feeder trough size.

- IP66 rated drive is ideal for washdown applications
- Excellent for cold room applications
- Externally adjustable air gap for simple, easy tuning
- Low noise level; approximately 70 db for high-frequency models and 60 db for low-frequency models (while running empty)
- Trough options include:
 - Straight, diagonal or peripheral type discharges
 - Trough covers to prevent contamination

Model BF-4

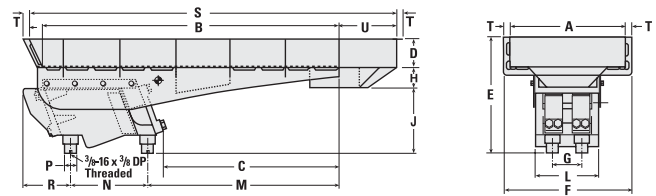
		A	B	C	D	E	F	G	H	J	L	M	N	P	R	S	T	U	V	W
Typical peripheral type discharge	(in)	20	51	30 3/8	5	19 5/16	22 1/8	5	3 1/2	11 1/8	11 1/8	33 1/4	13	2	8 1/8	63 5/16	1 1/4	10	-	-
	(mm)	508	1,295	772	127	491	562	127	89	283	279	845	330	51	206	1,608	32	254	-	-
Typical straight type discharge	(in)	14	73	48	5	19 11/16	16 3/16	5	1 1/2	13 15/16	11	51 5/16	13	2	7	75 5/16	1 1/4	11	4	3/4
	(mm)	356	1,854	1,219	127	500	411	127	38	354	279	1,300	330	51	178	1,913	32	279	102	19

Many other trough sizes available.

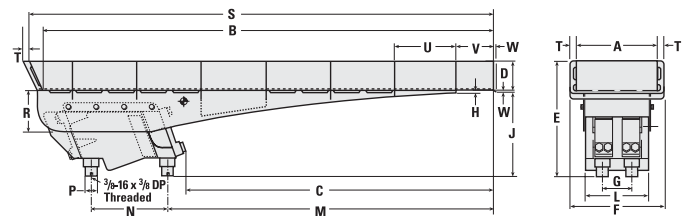
Feed Rate ■ : 11 tons per hour
 Approx. Ship. Wt: 500 lb (267 kg)
 Control Selection: Pages 20-21
 Approx. Net Wt, Feeder: 400 lb (181 kg)
 Approx. Current Input:
 @ 230 V, 50 Hz or 60 Hz, 9 amps
 Available for:
 115 V, 230 V, 460 V, 3600 VPM @ 60 Hz
 208 V, 230 V, 380 V, 3000 VPM @ 50 Hz

- Based on material weighing 25 lb per ft³ on a 20-inch wide trough.

Typical peripheral type discharge



Typical straight type discharge



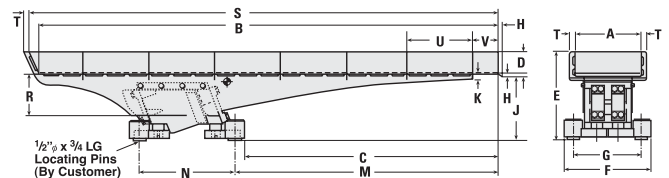
Model BF-4 Low Frequency

Straight Discharge BF-4-LF (Low Frequency)

	A	B	C	D	E •	F	G	H	J •	K	M	N	R	S	T	U	V
inches	16	115	66	5	20 3/8	20 1/2	16	3/4	14 5/8	1 1/2	68 1/4	21 5/8	9 1/2	117 5/16	1 1/4	15	4
mm	406	2,921	1,676	127	518	521	406	19	371	38	1,734	549	241	2,980	32	381	102

Many other trough sizes available.

Feed Rate ■ : 12 tons per hour
 Approx. Ship. Weight: 555 lb (252 kg)
 Approx. Net Wt, Feeder: 455 lb (206 kg)
 Control Selection: Pages 20-21
 Approx. Current Input: 230 V, 50 Hz or 60 Hz, 9 amps
 Available for:
 230 V, 460 V, 1800 VPM @ 60 Hz
 208 V, 230 V, 380 V, 2000 VPM @ 50 Hz



- Based on material weighing 25 lb per cu ft on a 20-inch wide trough.
- Height dimension E and J varies with trough weight.

Model HV-10 Features

Suitable for a Wide Range of Applications:

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

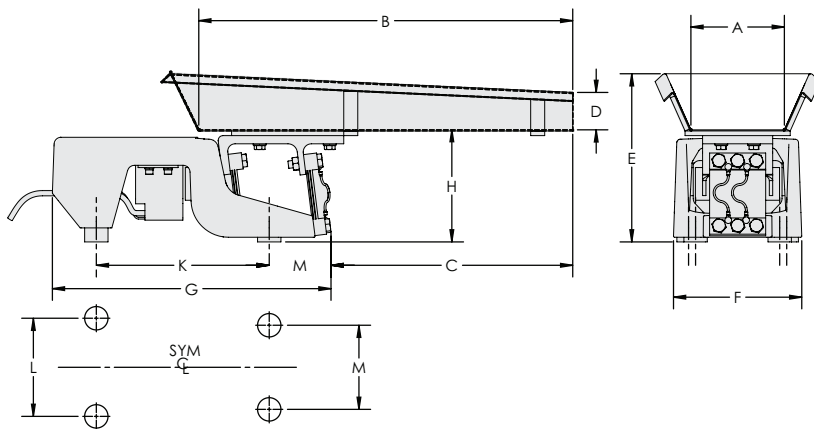
Great for Use in Food Processing and Packaging:

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

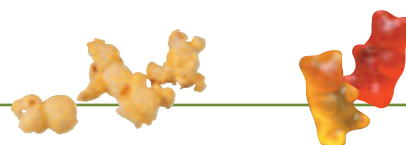
Model HV-10

Trough Type		A	B	C	D	E *	F	G	H *	K	L	M
Std. Flat Pan	(in)	6	24	12 ^{15/16}	2	9	6 ^{7/8}	14 ^{13/16}	6	9 ^{1/4}	5 ^{1/4}	4 ^{1/2}
	(mm)	152	610	329	51	229	175	376	152	235	133	114
Spec. Flat Pan	(in)	5	20	10 ^{15/16}	2	9	6 ^{7/8}	14 ^{13/16}	6	9 ^{1/4}	5 ^{1/4}	4 ^{1/2}
	(mm)	127	508	278	51	229	175	376	152	235	133	114
Spec. Flat Pan	(in)	8	20	10 ^{15/16}	2	10	6 ^{7/8}	14 ^{13/16}	7	9 ^{1/4}	5 ^{1/4}	4 ^{1/2}
	(mm)	203	508	278	51	254	175	376	178	235	133	114
Spec. Flat Pan	(in)	10	20	10 ^{15/16}	2	10	6 ^{7/8}	14 ^{13/16}	7	9 ^{1/4}	5 ^{1/4}	4 ^{1/2}
	(mm)	254	508	278	51	254	175	376	178	235	133	114
Spec. Flat Pan	(in)	12	14	6 ^{11/16}	2	10	6 ^{7/8}	14 ^{13/16}	7	9 ^{1/4}	5 ^{1/4}	4 ^{1/2}
	(mm)	305	356	170	51	254	175	376	178	235	133	114

HV-10



* Reference page 19 Mounting Codes



Standard troughs

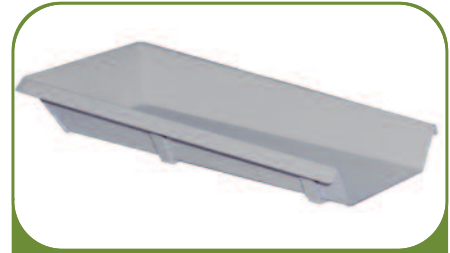
All Syntron® Light Industry Electromagnetic Vibrating Feeders are furnished with mild steel or stainless steel troughs. Mild steel troughs are painted or powder coated inside and outside with a high-quality polyurethane.

To meet food and pharmaceutical requirements, troughs are available in a variety of stainless steel finishes. A glass-beaded finish on stainless steel troughs is available for non-food applications.

Special coating can be applied to trough interiors. These include non-stick fluoropolymer, Urethane, rubber and others. Stainless steel and glass trough liners are also available to provide flat conveying surfaces. In addition, covers and/or downspouts are available.

The rule of thumb for trough selection suggests that the maximum dimension of the largest particle to be handled should not exceed one-third to one-half the trough width. Contact your Syntron Material Handling Sales Engineer or Application Specialist for a complete review of your application.

Modifications or additions to feeder troughs should not be made without first consulting Syntron Material Handling.



Flat Pan troughs are furnished as standard equipment for general purpose feeding. The trough bottom width is constant for its entire length. Straight or tapered walls are available.

Special trough styles



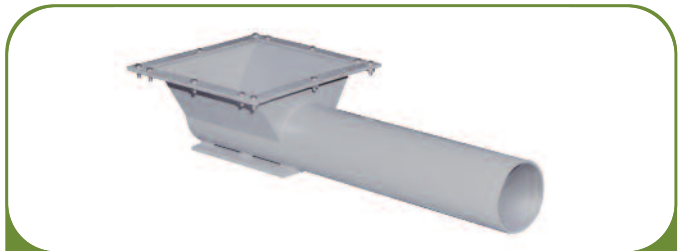
Tapered Width troughs provide nominal material concentration at discharge.



Diagonal Discharge troughs are used to spread the material discharge over the width of a belt or bucket lift positioned at 90 degrees.



V-Shaped troughs are used to discharge granular materials in a concentrated, narrow stream.



Tubular troughs are used when sealed conveying or feeding is required.

Special trough styles and drive configurations

Syntron Material Handling Solutions offers a wide variety of troughs including custom-designed troughs engineered specifically to meet your application requirements.

Customer applications that require extra-wide or long troughs can be met through the use of multiple drive feeders. Troughs for extra-width feeding can be furnished with glass or stainless steel liners. These liner materials are desirable for a uniform bulk material spread and to meet sanitary handling requirements. Trough sizes for wide multiple-drive feeders vary from 12 to 36 inches in length and from 12 inches to 12 feet in width. The number of drive units required for the trough depends upon its overall size.

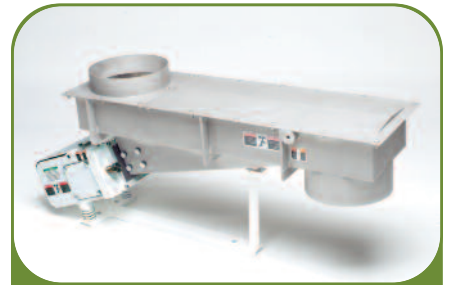
With long, tubular troughs, pure clean materials can be conveyed without atmospheric contamination. Poisonous, dusty materials can be conveyed without danger to processing personnel. Hot materials can be conveyed without the danger of burning belts or maintenance concerns.

For moving bulk materials over extended distances, multiple drives for extra-length troughs offer several advantages. The extra drives ensure uniform product movement when the unit is fitted with troughs of any desired length and capacity. They can be equipped with open, flat-pan troughs with or without removable covers, or tubular dust-tight troughs. Troughs can be provided in hot rolled steel or stainless steel.

For difficult applications where product drop is a concern, feeders constructed with the drive units above the trough are available.

The bulk material flow rate of all Syntron® multiple-drive feeders can be easily regulated. Control units for multiple-drive feeders are as easy to operate as the control unit for a single-drive feeder.

All Syntron feeders are low maintenance. There are no bearings, rollers, pulleys and chains to lubricate and replace; no drive belts to stretch and slip; no mechanical wearing parts. Syntron Vibrating Feeders have been selected for hundreds of installations because of their versatility. The low-profile design requires minimum headroom. Base mounting and suspension mounting configurations are available.



Syntron F-152 with covered trough.



Syntron F-152 with divided trough.



A wide, spreader feeder, using three Syntron F-010 drives.



Syntron F-T01-3 multiple drive feeder with tubular trough.



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.

F-Series Vibra Drives

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



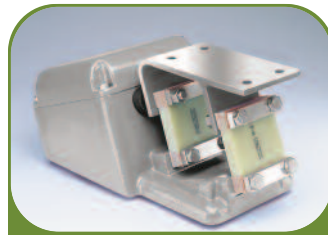
Model F-T0 will handle up to a 3½-pound mass with up to .060 stroke.



Model F-T01 will handle up to a 7 pound mass with up to .060 stroke.



Model F-T02 will handle up to a 9 pound mass with up to .090 stroke.



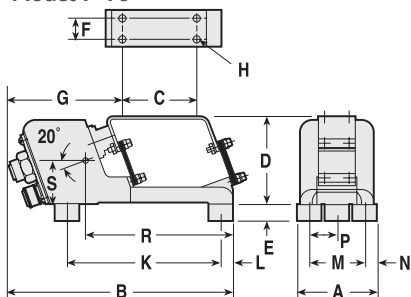
Model F-010 will handle up to a 13 pound mass with up to .060 stroke.

Drive Dimensions (inches, mm)

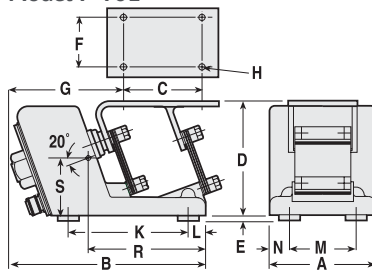
Model		A	B	C	D	E •	F	G	H	J	K	L	M ▲	N	P	R ■	S ■	T
F-T0	(in)	3¼	8¾	3	3 9/16	11/16	1	4¼	7/32 dia	-	6¼	½	2¼	½	1 1/8	5 ½	1 7/16	-
	(mm)	82.6	222.3	76.2	90.5	17.5	25.4	107.9	5.6	-	158.8	12.7	57.2	12.7	28.6	139.7	36.5	-
F-T01	(in)	5	9 1/8	3¾	5 3/8	¾	1¾	5¼	11/32 dia	-	5 5/8	13/16	3 1/8	15/16	-	5 ½	2 ½	-
	(mm)	127	231.8	95.3	136.5	6.4	44.5	133.4	8.7	-	142.9	20.6	79.4	23.8	-	139.7	63.5	-
F-T0-2	(in)	5	10 7/8	3¾	5 3/8	1 1/16	1¾	6 21/32	11/32 dia	-	5 5/8	13/16	3 1/8	15/16	-	5 11/16	2 ½	-
	(mm)	127	276.2	95.3	136.5	27	44.5	169.1	8.7	-	142.9	20.6	79.4	23.8	-	144.5	63.5	-
F-010	(in)	6	10 7/8	3¾	5 9/16	3/16	1¾	7 1/8	11/32 dia	¾	7 ¾	1	3 1/8	1 7/16	-	6 3/8	2 5/16	-
	(mm)	152.4	276.2	95.3	141.3	4.76	44.5	181	8.7	19	197	25.4	79.4	36.5	-	161.9	58.7	-

- Height E depends upon rubber mounting selected. See Available Rubber Mountings chart on page 16.
- ▲ Model F-T0 has two 1-inch dia. rubber feet on the rear and one on front. Models F-T01, F-010, BF-01 and BF-2 have two feet on the rear and two on front. Models F-T02, BF-4-LF and Velocity® RS drives feature coil spring isolators as standard components.
- Center of mass—this point should coincide with the center of trough mass at a 20° working angle.

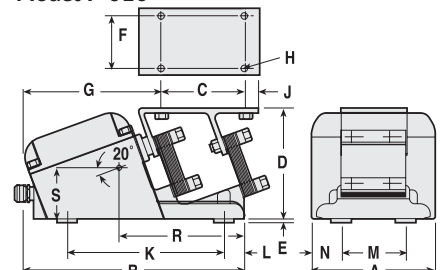
Model F-T0



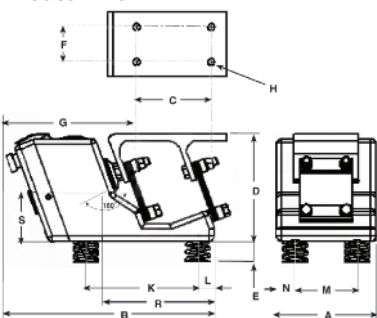
Model F-T01



Model F-010



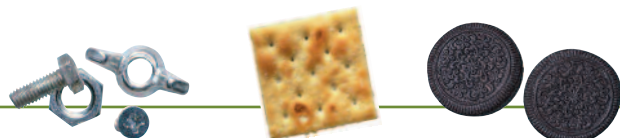
Model F-T02



Specifications

	F-T0	F-T01	F-T02	F-010
Approx. Power Consumption*	15 Watts	20 Watts	30 Watts	50 Watts
Approx. Current Input*	.35 amps	.9 amps	1.5 amps	2.0 amps
Approx. Net Weight, Drive	9 ½ lb	21 lb	33 lb	33 ½ lb

* Unit can be ordered to operate from virtually any commercial power supply up to 230 volts. A stepdown transformer is required when operating voltage is 460 volts. Please specify the voltage required and either 50 or 60 Hz at time of order.



Syntron® vibra drive units, cont'd.

IP66

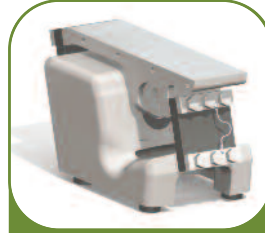
BF-Series Vibra Drives



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.



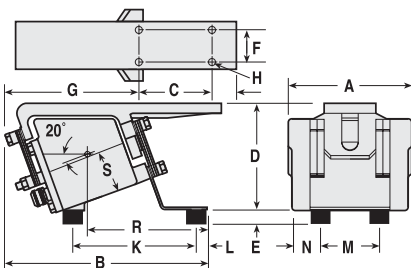
Model BF-4 LF drive will handle up to 110 pound mass with up to .120 stroke.

Drive Dimensions (inches, mm)

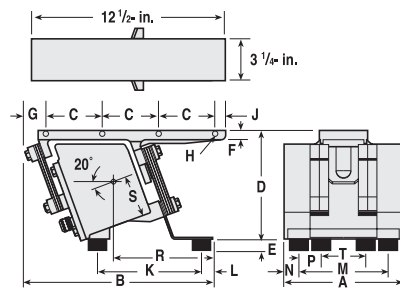
Model		A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T
BF-01	(in)	6 9/16	10 3/4	3 3/4	5 11/16	11/16	1 3/4	7 1/4	11/32 dia	1/2	6 9/16	9/16	3 1/8	1 23/32	-	6 3/4	2 1/4	-
	(mm)	167	273	95	144	17	44	184	9	13	167	14	79	44	-	171	57	-
BF-2	(in)	8	12 5/8	4	7 5/16	3/4	5/16	1 1/4	5/16-18 *	5/16	7	3/4	6	1	1 1/2	7 1/4	2 3/4	3
	(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	17/32	1	4	1/2-13 *	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 21/32	2 1/4	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.

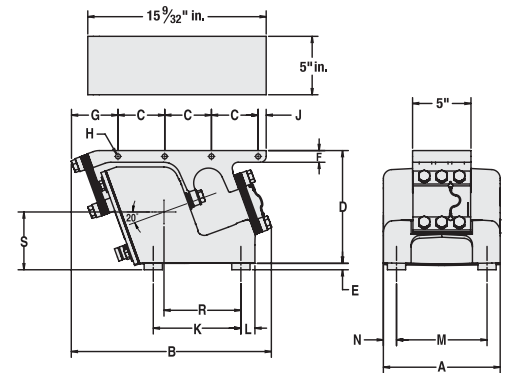
Model BF-01



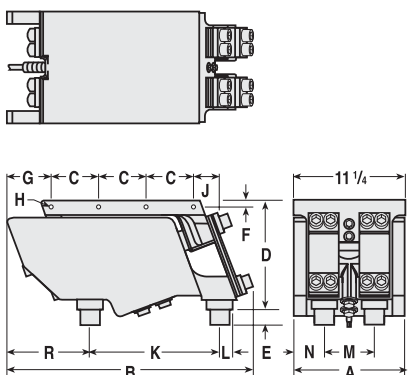
Model BF-2



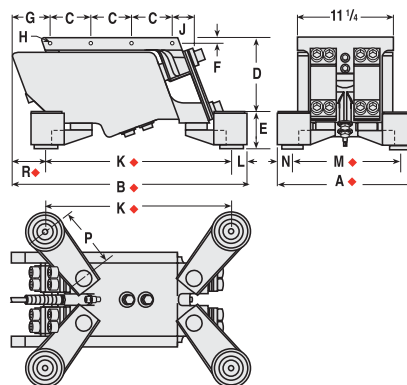
Model BF-3



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.

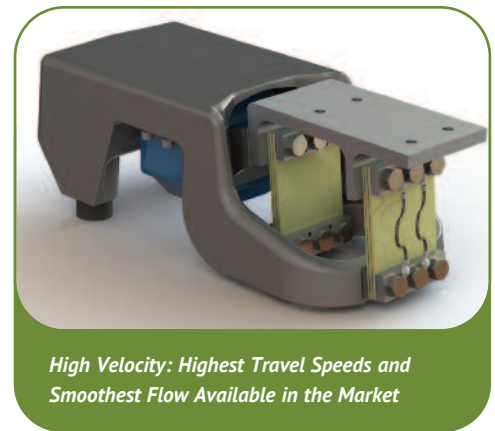
HV-10 Feeder Drive

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

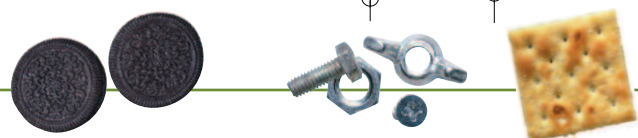
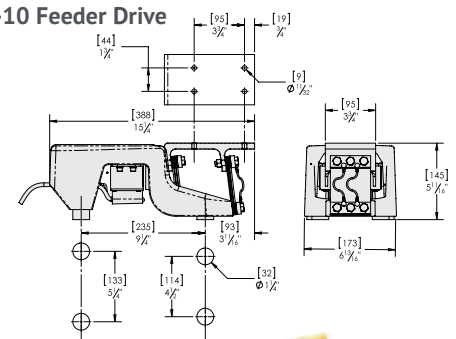
Feature	Benefit
IP-66	Great for use in Clean In Place environments
Open Design	Easy to Integrate and Setup
Interchangeable Trough	Can Interchange with any FT-01, FT-02, F-010 and BF-01 for immediate increased capacity
Uniform Material Flow	Great for use in sorting, blending and coating
Extreme Travel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



Syntron® feeder controls and systems

Syntron® Vibrating Feeders are furnished with a standard control to vary the flow of material through the feeder by adjusting the amplitude of the feeder pan. Standard control units include an operating switch, fuse and adjustable control to vary the amplitude.

Controls are available for 115, 230 or 460 volts, 50 or 60 cycle power and

are available for operation at other voltages upon request. Control units for multiple feeder applications are available. For special electrical standards, custom control enclosures can be provided. In addition to the standard controls listed here, Syntron Material Handling can provide control systems built to meet your requirements.

Velocity® RS drives can be provided with a separate, standard RC control (see pages 20-21) and are also available with a self-contained rectifier. Units with a self-contained rectifier operate at full stroke.

Control Model	Volts	Amps	Enclosure	Approvals	Intermittent Contacts	Intensity	Soft Start	Voltage Regulation	RC Output	AC Output
Power Pulse RC WT	115/230	5	Nema 4	cUL	●	Potentiometer			●	
Power Pulse AC WT	115/230	5	Nema 4		●	Potentiometer				●
Conductor DC 15	115	15	Nema 4	cUL	●	POT / 4-20mA	●	●	●	●
Conductor DC 28	230	8	Nema 4	cUL	●	POT / 4-20mA	●	●	●	●
Conductor DC 118	115	18	Nema 12	cUL	●	POT / 4-20mA	●	●	●	●
Conductor DC 218	230	18	Nema 12	cUL	●	POT / 4-20mA	●	●	●	●
Conductor 420	340/480	4-20	Nema 4	cUL	●	POT / 4-20mA	●	●	●	
Conductor 518	575	4-18	Nema 4	cUL	●	POT / 4-20mA	●	●	●	
Conductor CH 15	115	15	Open Chassis	cUL	●	POT / 4-20mA	●	●	●	●
Conductor CH 28	230	8	Open Chassis	cUL	●	POT / 4-20mA	●	●	●	●

● Standard in the model listed

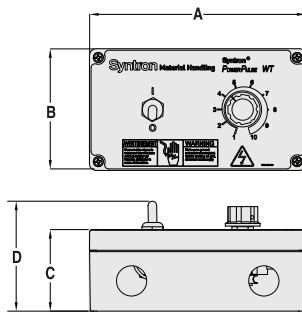
* Conductor controls are also available in open chassis models for ease in mounting in your system controls.

Note: Some open chassis models have reduced amperage capability. Contact Syntron Material Handling for details.

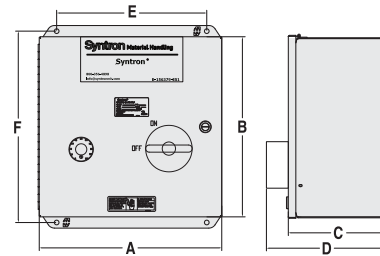
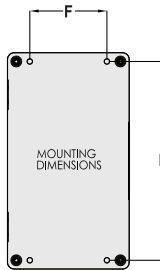


Control Dimensions

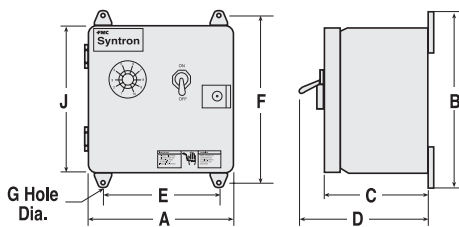
Control	A		B		C		D		E		F		G		H		J		Weight	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
Power Pulse WT	6 1/4	160	3 1/2	89	2 1/4	57	3 1/4	82	5 3/4	146	2 1/4	57	-	-	-	-	-	-	1 1/4	5
Conductor Series																				
15 & 28 Enc.	8	203	9 1/2	242	4 3/4	121	5 5/8	143	6 1/4	159	8 5/8	219	5/16	8	-	-	8	203	7	3.18
118 & 218 Enc.	8	203	10	254	4 3/4	121	5 5/8	143	6 1/4	159	8 5/8	219	5/16	8	-	-	8	203	8	3.63
420 & 518 Enc.	12 1/4	310	12 1/4	310	6	152	7 13/16	198	10	254	12 3/4	324	0.3	7.92	-	-	12	303	18.5	8.4
15 & 28 Open Chassis	3 15/16	100	3 13/16	96	3 1/16	78	-	-	3 1/4	82	3 1/4	82	0.18	4.5	-	-	-	-	0.58	0.26



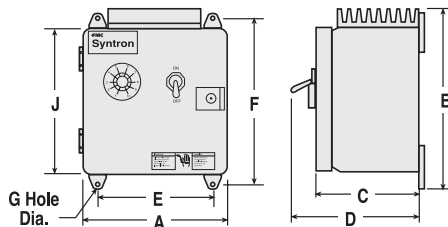
Power Pulse WT



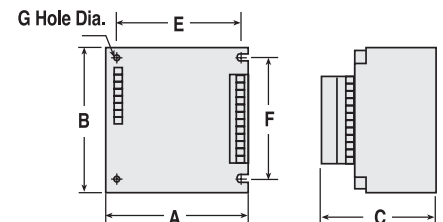
Conductor 420, Conductor 518



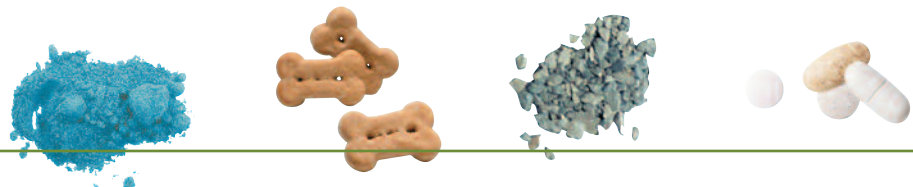
Conductor DC 15,
Conductor DC 28



Conductor DC 118,
Conductor DC 218



Open Chassis Conductor 15
and Conductor 28



Syntron® volumetric feeder machines

Total control in material handling for feeding, blending or packaging

Simple design and flexible control account for the efficient, economical performance of Syntron® Volumetric Feeder Machines, and the growing industrial preference for them. These units can feed most dry bulk materials and can be supplied to conform to FDA and USDA specifications. Six Syntron Volumetric Feeder Machine models are available.

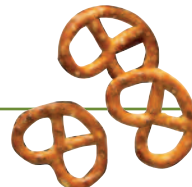
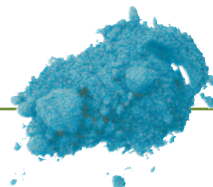
Syntron Volumetric Feeder Machine designs include four basic components: a supply hopper, a hopper vibrator, a vibrating feeder and the supporting frame. Supply hoppers are usually fabricated from mild steel but are available in stainless steel. Most supply hoppers are conical; however, rectangular hoppers are an option. Adjusting the gate height between the hopper and feeder trough regulates material depth for most models. Material depth for model FM-T0 is regulated by hopper tilt.

Arching, plugging or bridging of materials in the hopper is prevented through incorporation of a Syntron electromagnetic vibrator. The hopper vibrator features a variable power control, assuring free flow of material to the feeder trough. Vibrating feeders on the Syntron Volumetric Feeder Machines operate at 3,600 vpm (at 60 Hz) and trough options include flat pan (standard), V-shaped, tubular or screening troughs of mild or stainless steel.

Because of their simple design, Syntron Volumetric Feeder Machines are dependable and have an exceptionally long service life. There are no moving parts such as motors, belts, gears, valves, connecting arms or sliding rods to wear or lubricate. For dust-tight sealing, special covered or tubular troughs feature flexible seals on the discharge end of the supply hopper. In addition, flexible seals that seal the top of the supply hopper to an overhead chute, as well as removable dust covers for the supply hopper are available.



Syntron Volumetric Feeder Machine with conical supply hopper.



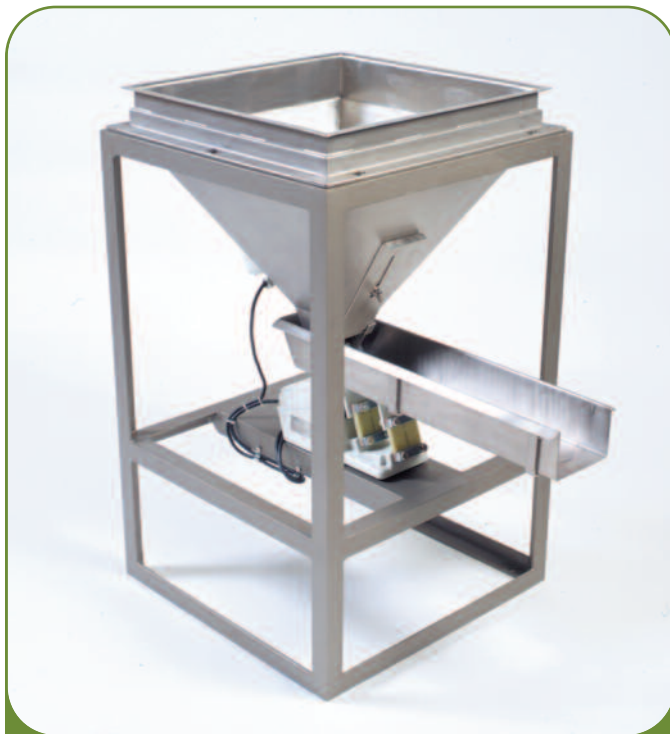
Drives on Syntron® vibrating feeders are available with dust-proof, dust-tight and waterproof construction. These units are virtually noiseless, meeting applicable OSHA specifications. Even at maximum feed, a hum is the only indication that the machine is operating.

Syntron Volumetric Feeder Machines are supplied with electric controls that can be mounted separately at any desired location. Standard controls contain operating switches, rectifiers and rheostats. The electric control regulates the feed rate by varying the vibrating intensity of the electromagnetic feeder. A graduated dial on the control panel permits variation of the flow speeds. Timers are also available to provide intermittent feed.

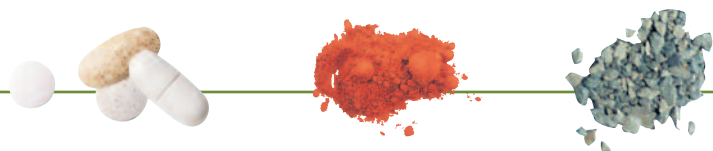
Capacities of Syntron Volumetric Feeder Machines vary with different materials. Lighter and finer materials result in less capacity and heavier materials result in higher capacities.



A custom-built SFM-212 Syntron Volumetric Screening Feeder Machine.



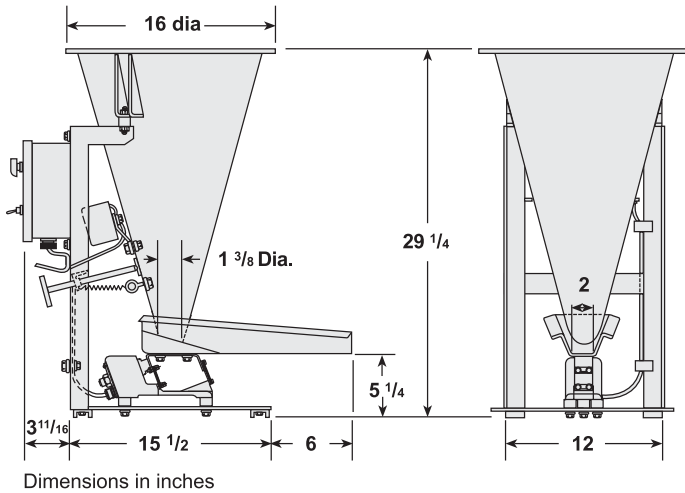
Syntron Volumetric Feeder Machine with customized rectangular hopper.



volumetric feeder machine models and dimensions

Model FM-T0-3/4

Syntron® Model FM-T0-3/4 is one of the smallest, most economical volumetric feeder machines available. This dependable unit is usually preferred for light-capacity, continuous-use operation. This model features a 3/4 cubic foot supply hopper, a V-2 hopper vibrator, an F-T0 vibrating feeder with 2 x 16-inch flat pan trough and a solid-state control. Configured for 115 volt, single-phase 50 or 60 cycle power. Operating at 230 or 460 volts requires a step-down transformer. Optional equipment includes a stainless steel supply hopper and/or feeder trough, trough and hopper covers.



WITH STANDARD 2-INCH X 16-INCH FLAT PAN TROUGH

MAXIMUM MATERIAL CAPACITY

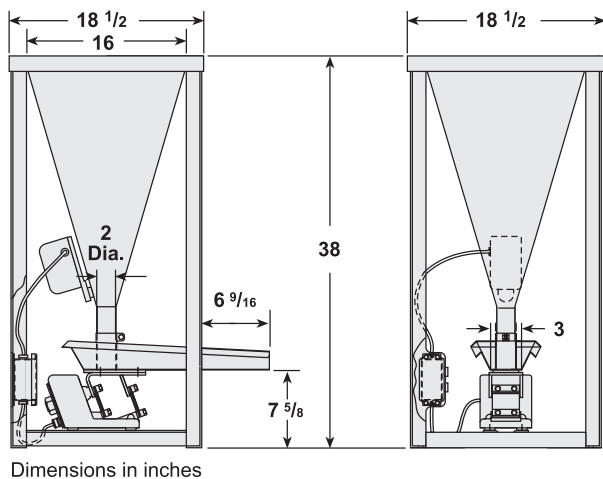
(sand @ 100 lb C/F) .625 TPH

SPECIFICATIONS

Power Consumption*	30 Watts	Net Weight, machine	55 lb
Current Input*	1.20 amps	Net Weight, Control	9 lb
*115 volt, 60 cycle		Shipping Weight, Both	125 lb
Control (inches) - 6 ^{15/16} W x 9 ^{1/2} H x 3 ^{5/8} D			

Model FM-T01-1

Syntron Model FM-T01-1, with a separate solid state control as standard equipment, has wider application than any other medium-capacity volumetric feeder machine in the Syntron line. This unit features a 1 cubic foot supply hopper, V-4 hopper vibrator and F-T01 vibrating feeder with a 3 x 18-inch flat pan trough. Configured for 115 or 230 volt, single-phase, 50 or 60 cycle power. Operating at 460 volt requires a step-down transformer. Optional equipment includes a stainless steel supply hopper and/or feeder trough, and stainless steel covers for trough and hopper.



WITH STANDARD 3-INCH X 18-INCH FLAT PAN TROUGH

MAXIMUM MATERIAL CAPACITY

(sand @ 100 lb C/F) 2 TPH

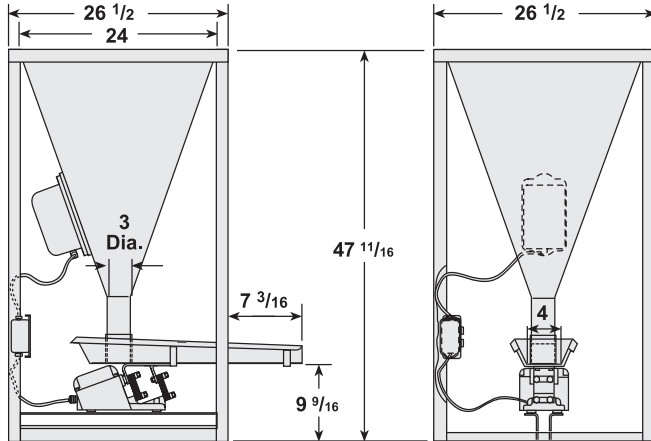
SPECIFICATIONS

Power Consumption*	75 Watts	Net Weight, machine	100 lb
Current Input*	1.75 amps	Net Weight, Control	9 lb
*115 volt, 60 cycle		Shipping Weight, Both	160 lb
Control (inches) - 6 ^{15/16} W x 9 ^{1/2} H x 3 ^{5/8} D			

Capacities of Syntron Volumetric Feeder Machines vary with different materials. Lighter and finer materials result in less capacity and heavier materials result in higher capacities.

Model FM-010-3

Syntron® Model FM-010-3, while similar in design to the FM-T01-1, has a larger capacity. This machine is furnished with a 3 cubic foot supply hopper, a V-20 hopper vibrator and a separate solid-state control. Model FM-010-3 includes an F-010 vibrating feeder with 4 x 24-inch flat pan trough. The FM-010-3 operates on 115, 230 or 460 volt, single-phase, 50 or 60 cycle power. A 460-volt power configuration requires a step-down transformer. Optional equipment includes stainless steel supply hoppers and feeder troughs and plastic, mild steel or stainless steel covers for trough and hopper. Hoppers are available in conical or rectangular design.



Dimensions in inches

WITH STANDARD 4-INCH X 24-INCH FLAT PAN TROUGH

Maximum Material Capacity
(sand @ 100 lb C/F) 4 TPH

SPECIFICATIONS

Power Consumption*	125 Watts	Net Weight, machine	180 lb
Current Input*	4.0 amps	Net Weight, Control	9 lb
*115 volt, 60 cycle		Shipping Weight, Both	340 lb
Control (inches) – 6 ^{15/16} W x 9 ^{1/2} H x 3 ^{5/8} D			

Model FM-152-3

Model FM-152-3, while similar in design to the FM-T01-1, also has a larger capacity. It is furnished with a 3 cubic foot supply hopper, a V-20 hopper vibrator and a separate solid-state control. Model FM-152-3 features an F-152 vibrating feeder with an 8 x 28-inch flat pan trough. It operates on 115, 230 or 460 volt, single-phase 50 or 60 cycle power. Optional equipment includes stainless steel supply hoppers and/or feeder troughs and special 6, 10 or 18 cubic foot supply hoppers with conical or rectangular design. Call the factory for assistance in selecting Syntron FM-152-3 volumetric feeders.



Custom designed FM-152-3 feeder machine with rectangular supply hopper.

WITH STANDARD 8-INCH X 28-INCH FLAT PAN TROUGH

Maximum Material Capacity
(sand @ 100 lb C/F) 7 TPH

SPECIFICATIONS

Power Consumption*	175 Watts	Net Weight, machine	225 lb
Current Input*	4.5 amps	Net Weight, Control	9 lb
*115 volt, 60 cycle		Shipping Weight, Both	440 lb
Control (inches) – 6 ^{15/16} W x 9 ^{1/2} H x 3 ^{5/8} D			



volumetric feeder machine models and dimensions, cont'd.

Model FM-212-3

Syntron® FM-212-3 offers economical, high-capacity performance. Standard construction includes a 3 cubic foot supply hopper, a V-20 hopper vibrator, a separate solid-state control and a powerful F-212 vibrating feeder with a 10 x 24-inch flat pan trough. Configured for 115, 230 or 460 volt, single-phase, 50 or 60 cycle power. Optional equipment includes stainless steel supply hoppers and/or feeder troughs and special 6, 10 or 18 cubic foot supply hoppers, with conical or rectangular design.



FM-212 feeder machine with custom rectangular supply hopper.

WITH STANDARD 10-INCH X 24-INCH FLAT PAN TROUGH

Maximum Material Capacity
(sand @ 100 lb C/F) 20 TPH

SPECIFICATIONS

Power Consumption*200 Watts	Net Weight, machine	475 lb
Current Input* 6.5 amps	Net Weight, Control	9 lb
*115 volt, 60 cycle	Shipping Weight, Both	600 lb
Control (inches) – 6 ¹⁵ / ₁₆ W x 9 ¹ / ₂ H x 3 ⁵ / ₈ D		

Model FM-22-50

Syntron FM-22-50 is a high-capacity unit. The supply hopper has a 50-cubic foot-capacity. A V-50 hopper vibrator moves bulk material to the 12 x 36-inch flat pan trough of an F-22 vibrating feeder. A solid-state control is mounted separately. Configured for 115, 230 or 460 volt, single-phase, 50 or 60 cycle power. Optional features include special hoppers up to 100 cubic foot capacity, stainless steel supply hoppers and/or feeder troughs. Call the factory for assistance in selecting and specifying Syntron FM-22-50 volumetric feeders.

WITH STANDARD 12-INCH X 36-INCH FLAT PAN TROUGH

Maximum Material Capacity
(sand @ 100 lb C/F) 30 TPH

SPECIFICATIONS

Power Consumption*450 Watts	Net Weight, machine	1,700 lb
Current Input* 14.5 amps	Net Weight, Control	11 lb
*115 volt, 60 cycle	Shipping Weight, Both	2,000 lb
Control (inches) – 6 ¹⁵ / ₁₆ W x 9 ¹ / ₂ H x 3 ⁵ / ₈ D		

Capacities of Syntron Volumetric Feeder Machines vary with different materials. Lighter and finer materials result in less capacity and heavier materials result in higher capacities.

Syntron® service and support

At Syntron Material Handling, we understand that good, reliable equipment – operating at peak performance – is crucial to your bottom line. That's why we're committed to giving our customers value – before, during and after the sale.

Syntron Material Handling Solutions are based on the most rugged, reliable and durable vibratory equipment available – Syntron vibrating feeders, conveyors, screens, parts feeders and bin vibrators. To begin with, we'll help you select the right equipment, considering all the variables of your application in order to maximize production and reduce costs.

Once you're up and running, our Syntron Services Team will keep you on top and moving ahead. We're on call – at the factory or in the field – wherever and whenever you need us for parts, service, inspection and training.

Dependable equipment is critical to your operation, and your success is critical to our success. At Syntron Material Handling, your satisfaction is our number one priority. You can rely on us.

Syntron Material Handling

www.syntronmh.com



Syntron Material Handling

Corporate Office

P.O. Box 1370
Tupelo, Mississippi 38802
Phone: 662.869.5711
Fax: 662.869.7449

Proven Engineered Products – Complete Material Handling Solutions

Syntron®
Link-Belt®

Saltillo
2730 Hwy 145 South
Saltillo, Mississippi 38866
Phone: 662.869.5711
Fax: 662.869.7493
Toll Free: 800.356.4898
info@syntronmh.com

Changshu
#2 Road No. 1
Changshu Export Processing Zone
Changshu, Jiangsu, China 215513
Phone: +86 0512.52299002
Fax: +86 0512.52297228
info@syntronmh.com