### PARTS FEEDERS / Product Combination **EA/ER/DMS** Series





### **13 ER-75B+LFG-900**







		Li	inear Fee	eder Mod	el	
Parts Feeder Model	Leaf-sp	ring vibro-i	solating	Rubber-n	nount vibro	-isolating
	LFB-300	LFB-400	LFB-550	LFG-600	LFG-750	LFG-900
EA/DMS-15	1					
EA/DMS-20	2					
EA/ER/DMS-25		3		4		
EA/ER/DMS-30		5		6		
EA/ER/DMS-38			7		8	
EA/ER/DMS-45			9		10	
ER-55B						11
ER-65B						12
ER-75B						13

All diagrams above show straight wall bowls, however combinations are also possible with track-stepped bowls. (Only bowl diameter and chute exit height vary; all other dimensions are the same for both types of bowl) Variety of combinations are possible, depending on the type of workpiece. Please contact us for more details.

## LINEAR FEEDERS / Leaf-spring Vibro-isolating type **LFBR Series**

# Low-reaction force linear feeder with less floor reaction

A leaf-spring vibro-isolating type linear feeder with reduced floor reaction. We enabled low-reaction force, high accuracy and smooth parts conveyance through our review of the drive unit mechanism in detail.





### **Dimensions Chart**

Model	Α	В	С	D	E	F	G	Н	I	J	K	L	М
LFBR-350B	70	170.5	12	93.5	45	13	12	M5	110	21	55	14	M8
LFBR-450B	80	205	20	107.5	55	13	14	M6	130	38	60	13	M8
LFBR-600B	95	274.5	25.5	133	75	16.5	19	M6	190	46	75	13	M10

### Chute Specifications, Including Basic Position

Model	Max. lengt	th Max. w	/idth	Min. t	hickness	Weight range (kg)		
LFBR-350B	350	40	)	9		0.4~1.2		
LFBR-450B	450	45	,		12	1.2~2.3		
LFBR-600B	600	55	,		14	2.3~4.0		
Model	Basic position (at max. chute length)							
model	L1	L2	L	3	L4	L5		
LFBR-350B	30~110	110~150	6	7.5	90	39		
LFBR-450B	70~150	150~190	82	2	110	46		
LFBR-600B	90~200	200~250	108	3	150	55		

### **Features**

#### Low floor reaction

By reviewing the drive unit mechanism, floor reaction force has been drastically reduced, compared with the existing leaf-spring vibro-isolating type.

- · Leaf spring and Core gap adjustment are unnecessary No troublesome leaf-spring adjustment or even core gap adjustment is necessary, by using the available C9, C10 series variable frequency digital controllers.
- No vibrational interference Because of the middle frequency vibration range (between Full and Half wave), vibrational interference will not occur, when used in combination with other parts feeders.
- Uniform chute vibration angle The entire chute vibration angle become uniformly, and has improved the parts conveyance become much more smoothly.
- •Low power consumption Driven near the resonance range enable to gain sufficient stroke in low current.

### **Specifications**

Model		LFBR-350B	LFBR-450B	LFBR-600B			
Rated voltage	۷	200					
Rated current	Α	0.12	0.14	0.28			
Vibration frequ	uency Hz	95~120	75~100	75~90			
Drive unit weig	ght kg	3.5	3.5 5.5				
Leaf-spring an	i <b>gle</b> degree	12	12 15				
Max. amplitude	e mm	0.60	0.65	0.75			
Cross section area of	power cable mm <sup>2</sup>	0.75 x 3 cores					
Compatible	AC200V	C10-1VF / 1VFEF					
controller	AC100V	C10-1	VF / 1VFEF+C	C10-TR			

Unit: mm

Unit: mm

### **LFBR Series chute dimensions**



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### **LFB** Series

### Generate uniform vibration without adjustment

Use of a variable frequency controller eliminates the need for leaf-spring and core-gap adjustments. Provides uniform vibration with no adjustments necessary, and is easily installed to link up with other equipment, greatly improving ease of use. Can accommodate heavier chute weights and longer overhangs, to widen scope for applications. The drive unit is slim, and with virtually no vibration interference it can easily be combined with parts feeders, to suit wide-ranging combinations. The three models in this series can be used selectively to handle all sizes and shapes of workpiece.

### **Features**

#### •Simple, uniform vibration

Use with heavier chutes and longer overhangs opens a wider range of applications. Consistent, uniform vibration is supplied without the need for adjustment.

• Energy saving type Energy consumption cut by half, compared with our earlier models.





### **Specifications**

Model		LFB-300	LFB-400	LFB-550		
Rated voltage	V	200				
Rated current	Α	0.04	0.08	0.15		
Vibration freque	ncy Hz	90~120	80~110	75~100		
Drive unit weigh	t kg	3.0	5.0	10.0		
Leaf-spring angl	le degree	15				
Max. amplitude	mm	0.6 0.65 0.75				
Cross section area of por	wer cable mm <sup>2</sup>	0.75 × 3 cores				
Compatible	AC200V	C10-1VF / C10-1VFEF				
controller	AC100V	C10-1VF+C10	0-TR/C10-1V	FEF+C10-TR		

Unit: mm

Unit: mm

### **Dimensions Chart**

Model	Α	В	С	Е	F	G	Н	I	К	L	М	Ν	0	Р	R	W	d
LFB-300	57	135	97	124	65	150	24	45	55	110	5	16	3	10	15	38	6
LFB-400	65	160	120	145	75	180	28	55	60	130	6	16	5	15	15	42	7
LFB-550	79	230	143	200	90	255	38	75	75	190	6	19	5	20	20	52	9

### **Chute Specifications, Including Basic Position**

Model	Max. lengt	h Max. w	ridth	Min. t	hickness	We	eight range (kg)	
LFB-300	300	50			6	(	0.4~1.0	
LFB-400	400	50			10	(	0.8~2.0	
LFB-550	550	65			14		1.4~3.5	
	Basic position (at max. chute length)							
Model	Ba	sic positio	on (at	max.	chute le	ngt	h)	
Model	Ba:	sic positic L2	on (at	max. 3	chute le L4	ngt	h) L5	
Model	<b>L1</b> 66	sic position L2 110	on (at L 4	<b>max.</b> 3 0	chute le L4 124	ngt	<b>h)</b> <u>L5</u> 3	
Model LFB-300 LFB-400	Ea: <u>L1</u> 66 105	sic position L2 110 150	on (at 4 7	<b>max.</b> 3 0	chute le <u>L4</u> 124 145	ngt	h) <u>L5</u> 3 5	

#### LFB Series chute dimensions



### **LFG** Series

# Accommodate with variety of chutes for ideal conveyance

The variable frequency controller installed as standard eliminates need for leaf-spring and core-gap adjustments. Easy installation and coordination make it much easier to use, and by adjusting position of the rear-end weight, conveyance irregularities can be quickly and easily eliminated. With minimal lateral movement, there is virtually no vibration interference, making it easy to combine with parts feeders for stabilized delivery. The three models in this series allow a full range of equipment combinations, and cover all shapes and sizes of workpiece. A leaf-spring vibro-isolating type linear feeder with reduced floor reaction. We enabled low-reaction force, high accuracy and smooth parts conveyance through our review of the drive unit mechanism in detail.



#### • Applicable longer and wider linear chutes. Because new LFG series have longer body from conventional models, more long and wide chutes can be applicable.

- Stable vibrating conveyance It prevents move of body caused by vibration with using original vibration isolation rubber.
- Withstand load improved
- Withstand load improved by applying a long chute
- Almost same size of drive unit compared with conventional size. \*Except chute installation tap positions Ability improved with same size from conventional size.

### **Specifications**

Model		LFG-600	LFG-750	LFG-900			
Rated voltage	۷	200					
Rated current	Α	0.2	0.37	0.41			
Vibration freque	ncy Hz	80~110	80~110	80~110			
Drive unit weigh	t kg	7.4	13.2	19.6			
Leaf-spring angl	e degree	15					
Max. amplitude	mm	0.65	0.75	0.9			
Cross section area of por	wer cable mm <sup>2</sup>	0.75 × 3 cores					
Compatible	AC200V	C10-	1VF / C10-1\	/FEF			
controller	AC100V	C10-1VF+C10	D-TR/C10-1V	FEF+C10-TR			

### Chute Specifications, Including Basic Position

Model	Max. len	gth Ma	x. width	Min. thick	ness <sup>Wei</sup>	ight range (kg)			
LFG-600	600		50	10	1	.4~3.6			
LFG-750	750		65	14	2	2.2~5.6			
LFG-900	900		75	18	4	.0~9.8			
Model	Model Basic position (at max. chute length)								
	LO	L1	L2	L3	L4	L5			
LFG-600	600	180	275	29	145	6			

LFG-000	000	100	275	29	145	0
LFG-750	750	220	330	74	200	16
LFG-900	900	260	390	92	250	18

#### **LFG Series chute dimensions**





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### **LF** Series

### Simple and compact. Handles a wide range of micro-sized precision parts

Developed for stabilized delivery of non-specialized micro-sized and precision parts, this series uses a small, electromagnetic drive unit that is simple and compact. Unmounted, with full wave operation to give excellent conveyance capacity for small volumes of non-specialized micro-sized workpieces. Maintenance is very straightforward and minimizes costs.



### **Features**

•Handles a wide range of small parts Handles a wide range of non-specialized micro-sized, precision parts

·Simple and low cost Provides a simple, low-cost solution for small-volume applications.

#### ·Easy, convenient installation

Compact design allows easy, convenient installation.



### **Specifications**

Model	Rated Voltage (V)	Rated Current (A)	Vibration frequency (Hz)	Weight (kg)	Standard compatible controllers
LF-02B	100/110	0.12	100~180	0.45	C10-1\/F/1\/FFF
LF-04B	100/110	0.16	100~180	1.0	

Unit: mm

### **Chute Specifications**

Compatible linear feeder	Max. length	Max. width	Max. weight (kg)
LF-02B	180	20	0.2
LF-04B	240	30	0.4

**MF** Series

### Compact yet powerful, for speedy delivery and versatile, longer distance conveyance

A new type of electromagnetic drive unit ideal for use with chutes handling very small, flat, and precision parts. Takes full advantage of merits of half wave operation for smooth conveyance of fragile and easily damaged workpieces.



### **Features**

·Compact yet powerful Small unit size with half wave operation capable of longer distance conveyance.

- ·Speedy delivery, and versatile, longer distance conveyance High vibration frequency and amplitude give speedy delivery, and can meet a range of loner distance conveyance requirements
- •Easy, convenient installation Compact design takes up little space and allows easy, convenient installation.

### Specifications

- opee							
Model	Voltage (V)	Current (A)	Vibration (Hz)	Weight (kg)	Standard compatible controllers		
MF-04C	100/110 200/220	0.13 0.065	50~90	0.6	C10-1VE/1VEEE		
MF-15C	100/110 200/220	0.2 0.1	50~90	1.8			

<b>Dime</b>	Dimensions Chart Unit: mm													
Model	Α	В	С	D	E	L	М	N	0	Р	Q			
MF-04C	46	106	56	38	62	88	7	9	38	9	3.2			
MF-15C	56	160	78	52	100	144	9	16	52	8	3.2			

### **Chute Specifications**

Compatible linear feeder	Max. length	Max. width	Max.
MF-04C	300	35	
MF-15C	450	45	
Note: Chute must straddle drive uni	t to distribute weight.		







\*Users are asked to drill holes as required for chute attachment.

Unit: mm	
weight (kg)	
0.4	
1.5	

### **LF** Series

**Features** 

leaf-spring angle.

large workpieces

conveyance speed

workpiece delivery

• Large size feeder provides smooth

workpieces smooth through adjustment of

Large, vibro-isolating feeder that keeps the flow of

· Fast, stable delivery of high volumes of

By changing the vibration frequency and amplitude with

the dial control, delivery speed can be freely adjusted.

Extremely high conveyance efficiency allows high-volume delivery of large workpieces.

· Dial control for free adjustment of

### For stable feeding of large volumes of large workpieces

Large-capacity electromagnetic drive unit has strong coil springs positioned at front and rear, and drive controlled by amplitude angle adjustment, to give speedy, steady, straight-line delivery of large-sized workpieces. The low-floored half-wave drive provides uniform amplitude and vibration frequency to eliminate irregularities during high-volume conveyance of large workpieces.



# Dimensions LF-30/40 Unit: mm Feed direction 4-**Ø**9 Coil-spring mounts, av. diameter Power cable 700 LF-30:\$\$.4x\$\$\$28x34\$ LF-40: \$\$\phi 4.0 \times \$\$\phi 28 \times 34\$

Unit: mm

### **Specifications**

Mod	del	Leaf-s adjustme	spring ent angle	Rated	ted Rated Vibration ge (V) current (A) frequency (Hz) Weight (kg) Cross section area of power cable (mm					
		α	β	10111go (1)	••••••(••)			•••••••••••••••••••••••••••••••••••••••		
LF-3	30	0°~20°	10°~30°	200/220	1.5	50~90	25	1.25 x 3.core	C10-3VE/3VEEE	
LF-4	40	0°~20°	10°~30°	200/220	1.6	50~90	33	1.23 X 0 0016	CIO-SVF/SVFEF	

Dimensio	ns Chart

Model	Α	В	С	D	E	F	Н	I	J	к	L	М	N	Р
LF-30	182.4	156.4	180.4	150.4	410	295	55	380	30	40	190	162	132	30
LF-40	196.4	166.4	186.4	154.4	500	375	55	470	30	40	250	177	147	30

Unit: mm

### **Chute Specifications**

Applicable linear feeder	Max. length	Max. width	Max. weight (kg)			
LF-30	650	120	3.5			
LF-40	750	150	5.5			

Feeder-type

Hopper



### Features

• By attaching a feeder to a hopper, smooth components feeding is accomplished. Moreover, running noise is extremely low.

### **Dimensions Chart, including Feeders**

Hopper	Madal	Compatible	Permissible		_		-	-				K			Sliding	•	-	Weight	Electromagnetic feeder	
capacity ( g )	Model	feeders	work	A	В	C	E	F	G	н	I	ĸ	L	N	No.xP	5	1	(kğ)	Feeder model	Rated current(A)
		EA-25																		
15	HPF-15-3815B	ER-25B	24	250	350	322	675~	320	7	270	275	380	381~	150	E V EO	210	225	46	CE-2	0.5
10	1111 10 00100	EA-30	27	200	350	522	875	520		210		580 '	100	100 0 0 0 0	310	220	40	01-2	0.5	
		ER-30B																		
		EA-25			400	0 372	775~ 975	350 7							150 5 x 50			50	CF-2	
		ER-25B	24						0 7 29	290	325 4									0.5
		EA-30										325 420 380	380~ 580 150							
30	HPF-30-4215B	ER-30B		300										150		360	265			
		EA-38																	0.0	
		ER-38B																		
		EA-45																		
		ER-45B																		
60	* HPF-60-6030B	ER-55B	56	450	600	553	865~	500	9	400	480	600	430~	300	8 x 50	536	(358)	140	CF-3	10
		ER-65B			000	000	1215	000	Ĵ			0.00	780	000	0 00	000	(000)	. 10	0. 0	
100	* HPF-100-6030B	ER-55B	56	450	600	553	1015~	500	9	400	480	600	430~	300	8 x 50	536	(358)	147	CE-3	10
	1.1.1.00 00000	ER-65B		.50		000	1365	000			.50	000	780	000	0 × 00	000	(000)		0.0	1.0

Hopper material is stainless steel only. Notes

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4 For 15 and 30-liter hoppers, hopper heights becomes 5 levels with 50mm intervals: for 60- and 100-liter hoppers, hopper heights becomes 8 levels with 50mm intervals.
\*5 Heavy-duty 60- and 100-liter hoppers (permissible total work weight 112kg) are available as non-standard models.

\* Manufactured to order.



Unit: mm

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