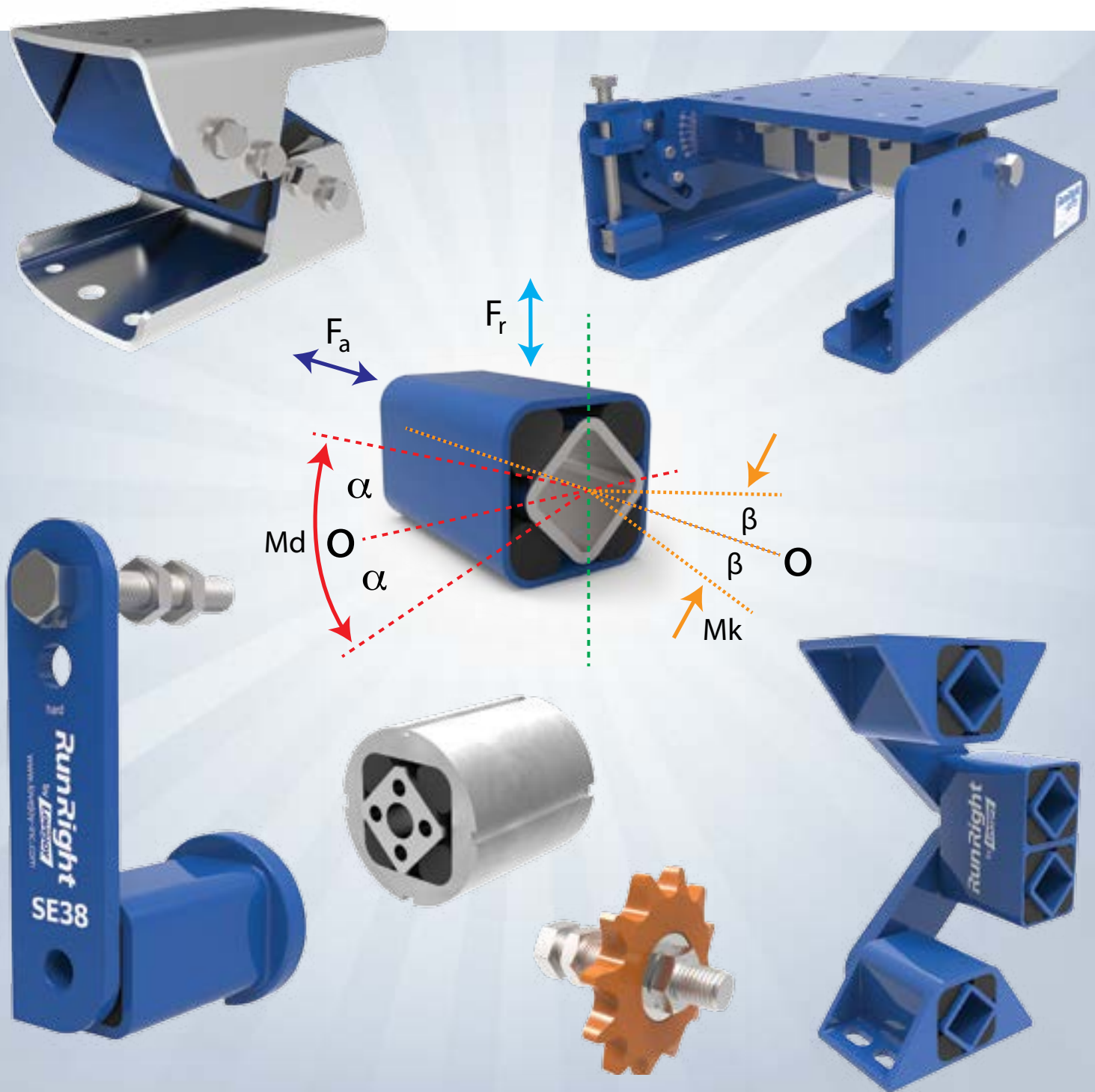


# RunRight<sup>TM</sup>

by **Lovejoy**

Tensioners  
Sprocket / Idler Accessories  
Motorbases  
Oscillating Mounts  
Rubber Suspension Units  
Anti-Vibration Mounts



The leader in elastomeric tensioning devices.



## Over a Century of Invention...

With its longstanding reputation for innovation, service and quality-driven work performance, Lovejoy, Inc. has developed the expertise to engineer products that address the complex needs of its customers' applications. No matter what the application, Lovejoy has the selection, service and solution for it.

Thomas Lovejoy established this company in 1900 as a manufacturer of tooling and machinery for the railroad and steel industries. The company's pioneer work over the next century in advancing manufacturing technologies has included the introduction of the industry standard Jaw-style coupling in 1927, as a first, incorporated rubber in-compression power transmission concept. Through the years, Lovejoy, Inc. continuously added to the power transmission elastomeric and metal coupling offering with the manufacturing of universal joints, variable speed pulley products, Uniflex, Torsional, S-Flex, Delta Flex, Gear, Disc, Curved Jaw, Jaw In-Shear as well as adding Motion Control and Grid. With the same trust earned in the Power Transmission Industry, Lovejoy, Inc. has grown to serve similar industries. For over sixty years, Lovejoy, Inc. has been offering to the hydraulics industry a full line of couplings, reservoirs and accessories, oil coolers, and pump / motor mounts. Lovejoy, Inc. also moved into additional industries more than thirty five years ago using elastomeric elements, which function as either a vibration control, spring action, tensioning device or bearing alternative.

## Global in Reach, Service and Support...

Lovejoy, Inc. has grown to become an international market leader by expanding its reach into the global marketplace. Lovejoy products are available through a network of distributors, which are located in every major market throughout North America and in over 80 other countries. Lovejoy, Inc. ships more than 100,000 components each week. These components are exported globally – to Africa, Asia, Australia, Eastern and Western Europe, Central and South America, the Caribbean and the Middle East, as well as throughout North America. World headquarters are in Downers Grove, Illinois, USA with more than 400 employees worldwide, as well as business operations located in the United States, Canada and Germany. In the United States alone, there are more than 30 sales offices and regional warehouses.

**RunRight**<sup>™</sup>  
by **Lovejoy**



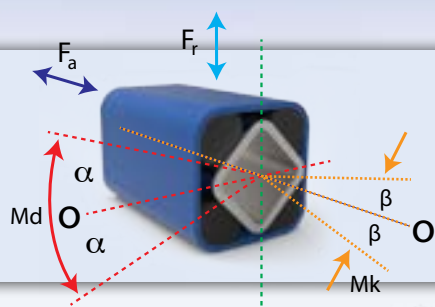
Lovejoy, Inc. World Headquarters in Downers Grove, Illinois USA



Lovejoy continues to innovate and improve their products to optimally serve the many industries it supports.

## Our Commitment to Customers...

Lovejoy, Inc. has a worldwide reputation for building and sustaining long-term customer satisfaction through quality of service, products and design reliability. Certified to ISO 9001:2008 International Standards for Quality Management, Lovejoy, Inc. manufactures all of its products to the exacting requirements of international standards such as AGMA, ANSI, SAE, DIN, JIS and Imperial. Lovejoy, Inc. is also an accepted supplier of products that match military specifications.



## Technology Overview

See pages 4-7

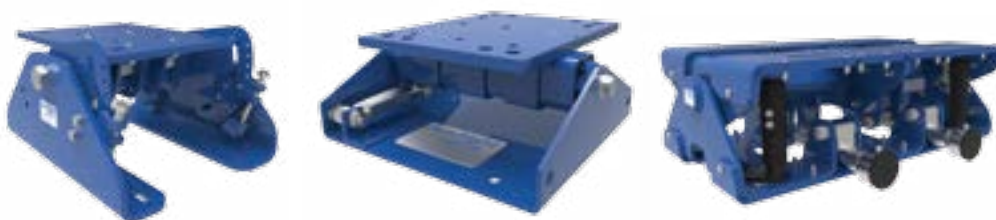
TECHNOLOGY



## Tensioner Devices

See pages 8-21

TENSIONER DEVICES



## Motorbases

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MOTORBASES



## Oscillating Mounts

See pages 32-47

OSCILLATING MOUNTS



## Rubber Suspension Units

See pages 48-58

RUBBER SUSPENSION



## Anti-Vibration Mounts

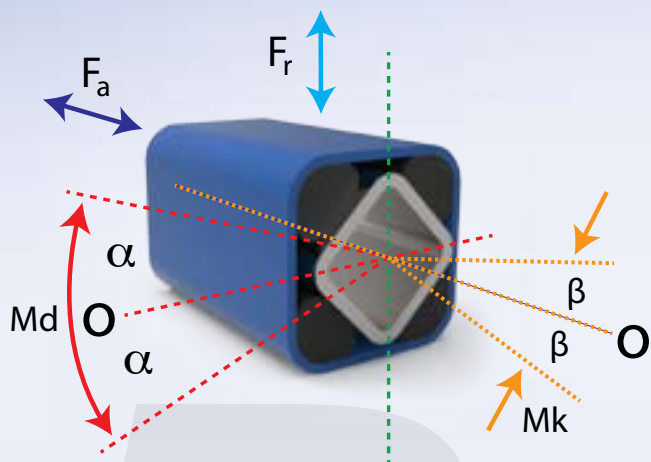
See pages 60-66

ANTI-VIBRATION



# RunRight™ Product Technology

The leader in elastomeric tensioning devices.

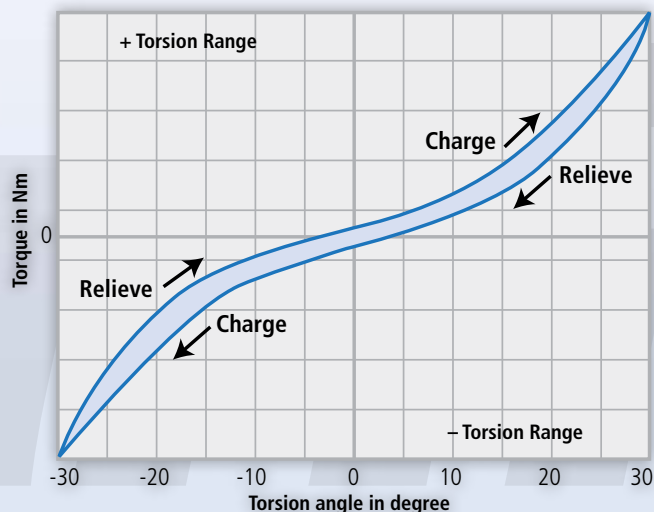


## What makes RunRight™ Products Superior

RunRight™ rubber suspension units are designed for use in applications requiring a torsional spring feature with angles of operation of  $\pm 30^\circ$ . When using these units in an application, the torsional force that is applied as well as the radial, axial and/or cardanic forces need to be taken into consideration when sizing a unit. See page 51 for the applicable RunRight units' torque and load characteristics.

## Spring Characteristic

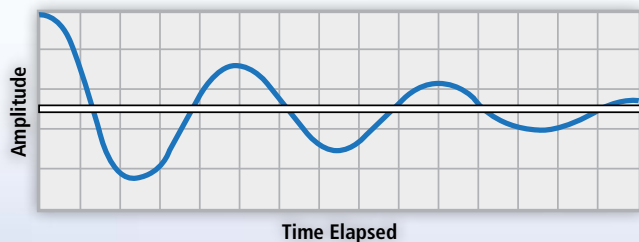
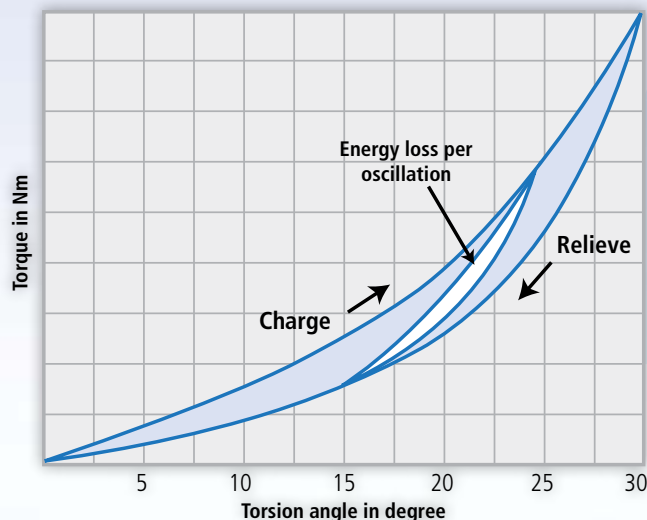
When the RunRight rubber suspension units are pivoted, a nearly linear spring characteristic occurs with a slightly progressive upper end, with a load applied close to a  $30^\circ$  rotation of the element. To obtain a functionally adapted spring characteristic, the leverage point may need to be altered and/or arm guidance may be needed through the use of a cam-disc. The volume of the elastomeric inserts will remain constant when in use.



## Element Dampening

The energy dampening that takes place with the RunRight unit is the resulting energy loss that occurs in the rubber inserts during the pivoting action of the spring device. When the unit is pivoted, part of the created energy generates heat or frictional work. The area between the load and relieve headline indicates the resulting energy loss of the unit. 15% to 20% on average of energy loss occurs when the unit is actuated from the "0" zero position up to  $30^\circ$ . However, with pre-tensioned units, the actuated working angle is reduced to a few degrees, resulting in a reduced energy loss, see "Energy loss per oscillation" on graph.

Vigorous unit oscillations fade quickly following each post-pulse oscillation due to the occurring high energy loss. This is an important attribute when using the RunRight unit for screen mountings. The effects of power loss on the screen during normal operation is negligible; however, during the shutdown phase, an important amplitude exaggeration occurs which is close to the resonance frequency of the RunRight unit. Thus the RunRight unit absorbs and dampens the exaggerations, resulting in high energy loss within a few post-pulse oscillations.

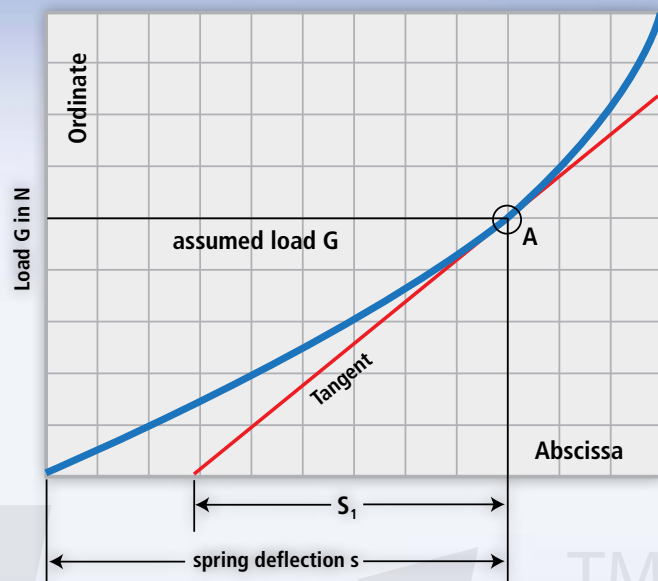
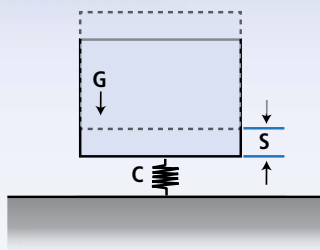


**RunRight™**  
by **Lovejoy**



## Natural Frequency

The calculation of the natural frequency of a RunRight™ suspension unit has to be solved by drawing the tangent line at the loading point "A" of the parabolic arc of the load deflection curve. The distance on the axis of the abscissa, i.e. resulting "S", designates the arithmetical spring deflection in mm which is required for the determination of the natural frequency.



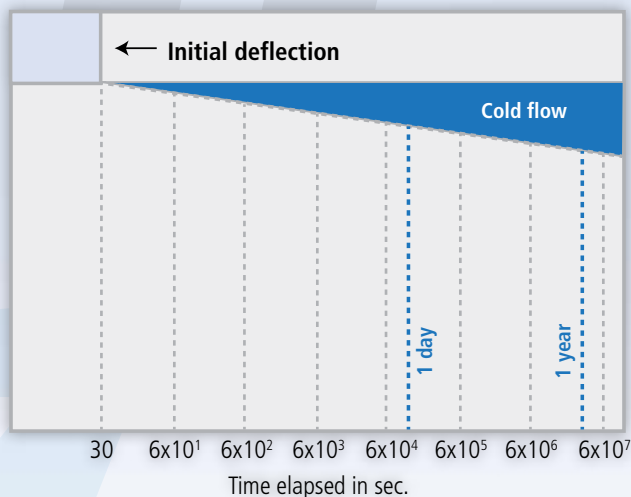
$$\text{Natural frequency } n_e = \frac{300}{\sqrt{s_1} \text{ (in cm)}} = \text{RPM}$$

$$\text{or } f_e = \frac{5}{\sqrt{s_1} \text{ (in cm)}} = \text{Hz}$$

$$\text{Example } s_1 = 5 \text{ cm: } n_e = \frac{300}{\sqrt{5.0}} \cong 134 \text{ RPM or } 2.2 \text{ Hz}$$

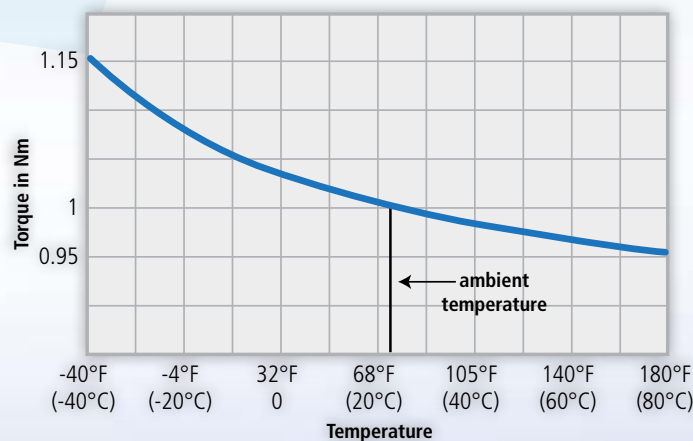
## Cold Flow and Deformation

When a load is continually applied to an elastic material, such as the Tensys units, deformation or cold flow occurs. Cold flow appears during a linear logarithmic sequence. The corresponding chart shows that more than 50% of this deformation occurs after only one day of installation. Depending on the environmental temperatures and applied frequencies, after approximately one year of installation the total deformation of the units has occurred. The empirical settling factor of a RunRight rubber suspension unit is within 3° to 5°. Therefore, the inner square will not totally move back to the neutral position of the element. With applications where there are several units in a series or parallel configuration (i.e. the AB screen mountings) there is approximately +10% of effective cold flow of the nominal deflection curve. This effect must be taken into consideration when using RunRight units on screen mounting or axle bearings designs.



## Temperature Effect

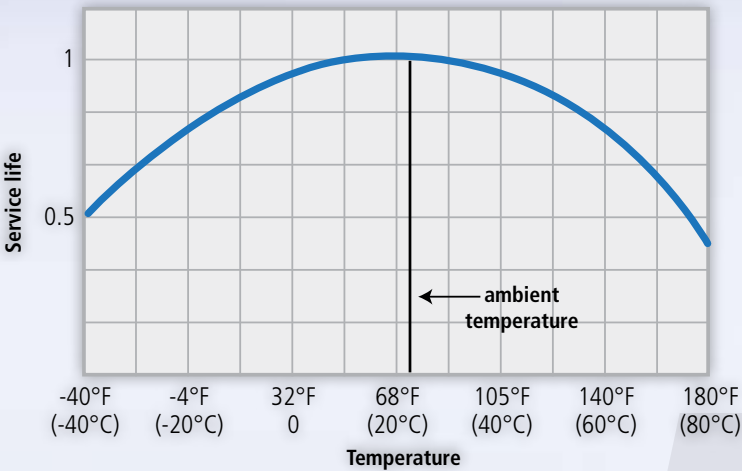
RunRight rubber suspension units manufactured with the Tensys™ 10 elastic inserts are designed to be used between the temperatures of -40° to 180°F (-40° to 80°C). When temperatures rise the mechanical stiffness of the rubber inserts and the resulting element torque will decrease within acceptable tolerances to approximately -5% at 180°F (80°C). At temperatures below freezing the torsional element stiffness will increase to a maximum of +15% at -40°F (-40°C). Also, the hysteresis of the RunRight rubber suspension units will increase at lower temperatures and then decrease with rising temperatures. The internal molecular friction caused by the torque applied to the element will warm the rubber inserts in a continuous manner. Therefore, the effective element temperature can vary in relation to the temperature of the environment.



# RunRight™ Product Technology

## Service Life

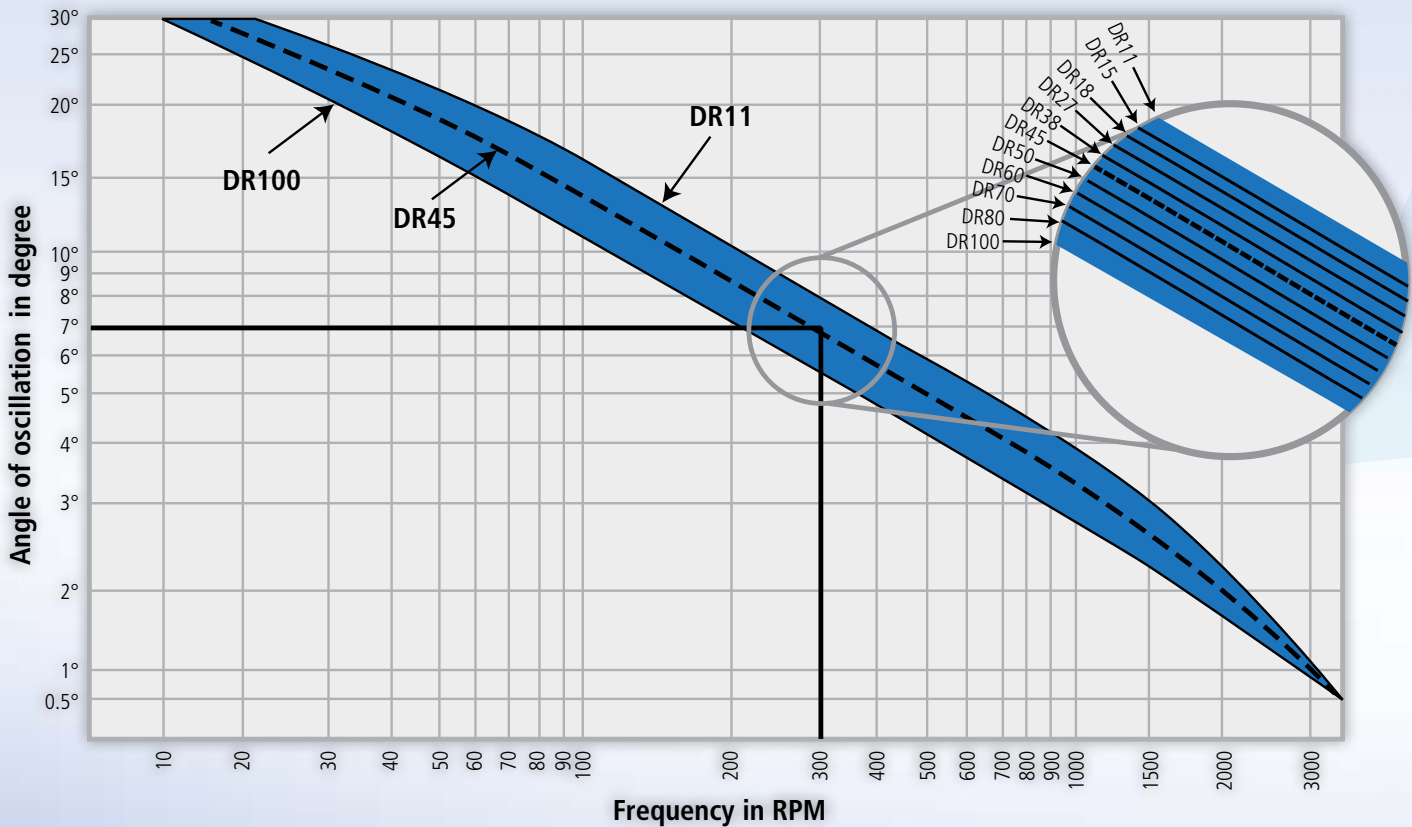
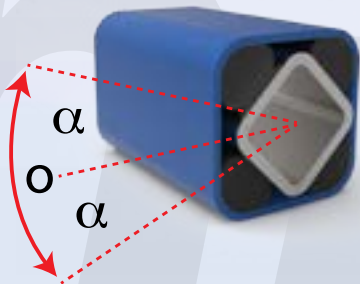
When the rubber suspension units are operating within the specified frequencies, oscillation angles, and recommended surrounding conditions, the unit's performance and function will be expected to perform for many years. Extremely low or high permanent temperatures will significantly shorten the life expectancy of the rubber suspension units. The Service Life Curve Chart shown to the right shows the life reduction at extreme high and low temperatures using a service life of 1 at the room temperature of 72°F (22°C).



## Allowable Element Frequencies

Selection chart below is used for the determination of the maximum allowable frequencies dependent on the rubber suspension unit size (DR11, 15, 18, etc.) and the oscillation angle. The higher the frequency, the lower the oscillation angle and the lower the frequency, the higher the oscillation angle as shown in the Allowable Element Frequencies below.

Example: A rubber suspension unit DR45 can be rotated from the neutral position of 0° to an oscillation angle of +/-7° with a maximum frequency of 300 RPM. Contact Lovejoy for applications of "pre-tensioned" elements working, i.e. under 15° of pre-tension and describing oscillation angles of +/-5° at 300 RPM.



# RunRight™

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## Rubber Characteristics

The majority of RunRight™ rubber suspension units are manufactured with Tensys™ 10 natural rubber inserts. The high content of natural rubber in the Tensys 10 offers shape retention, a limited amount of deformation, high mechanical load capabilities and limited hardening of the inserts. Applications requiring high oil resistance, high heat resistance or higher torque capability requires a different elastomeric insert as shown in the chart below.

Rubber Compounds	Torque & Load Factor*	Operating Temperature F° (C°)	Rubber Type	Rubber Characteristics
Tensys™ 10	1.0	-40° to 180° (-40° to 80°)	Natural	Standard
Tensys™ 20	approximately 1.0	-22° to 195° (-30° to 90°)	Neoprene	Oil Resistant
Tensys™ 30	approximately 1.0	-40° to 180° (-40° to 80°)	Natural	High-Dampening (motorbases only)
Tensys™ 40	approximately 0.6	180° to 250° (80° to 120°)	EPDM	High Temperature Resistant
Tensys™ 50	approximately 3.0	-31° to 195° (-35° to 90°)	Urethane	High Torque

Note: ■ \*Factor in relation to torque & loads shown on standard selection charts.

## Chemical Resistance

Standard RunRight rubber suspension units are manufactured with Tensys 10 elastic inserts. The quality of this rubber is due to the high content of natural rubber. This rubber offers a high chemical resistance to many solutions. There are some applications that would require synthetic elastomeric inserts. In these applications Tensys 20 or 40 would be required. When using the synthetic units, the characteristics of the inserts differ slightly, see Rubber Characteristics above for more information. The Chemical Resistance table below is a guideline for chemical compatibility. Please contact Lovejoy for specific applications regarding environmental conditions and the concentration of specific liquids or particulates that would come into contact with the rubber suspension units.

Tensys™	10	20	30	40	50
Acetone	+	--	+	++	--
Alcohol	++	++	++	++	-
Benzene	--	--	--	--	--
Caustic Soda Solution up to 25% (20°)	++	++	++	++	--
Citric Acid	++	+	++	-	--
Diesel	--	+	--	--	+
Formic Acid	+	+	+	-	--
Glycerine	+	+	+	++	--
Hydraulic Fluid	-	+	-	--	--
Hydrochloric Acid up to 15%	++	+	++	-	--
Javelle water	+	+	+	++	--
Lactic Acid	++	++	++	++	+
Liquid Ammonia	+	+	+	++	--
Lubricating grease and oil	--	+	--	--	+
Nitric Acid up to 10%	--	+	--	+	--
Nitro thinner	--	--	--	--	--
Fuel	--	-	--	--	++
Petroleum	--	+	--	--	++
Phosphoric Acid up to 85%	--	--	--	--	--
Seawater	++	+	++	++	--
Sulphuric Acid up to 10%	+	-	+	-	--
Tannic Acid	++	+	++	++	--
Toluene	--	--	--	--	--
Treacle	++	++	++	++	-

Key: ++ excellent consistency  
 + good consistency  
 - sufficient consistency  
 -- insufficient consistency



# RunRight™

by **Lovejoy**

TENSIONER DEVICES



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# Tensioner Devices

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## Safety Warning



When using Lovejoy products, you must follow these instructions and take the following precautions. Failure to do so may cause the power transmission product to break and parts to be thrown with sufficient force to cause severe injury or death.

Refer to this Lovejoy Catalog for proper selection, sizing, horsepower, torque range, and speed range of power transmission products, including elastomeric elements for couplings. Follow the installation instructions included with the product, and in the individual product catalogs for proper installation of power transmission products. Do not exceed catalog ratings.

Do not use any of these power transmission products for elevators, man lifts, or other devices that carry people. If the

power transmission product fails, the lift device could fall resulting in severe injury or death.

For all power transmission products, you must install suitable guards in accordance with OSHA and American Society of Mechanical Engineers Standards. Do not start power transmission product before suitable guards are in place. Failure to properly guard these products may result in severe injury or death from personnel contacting moving parts or from parts being thrown from assembly in the event the power transmission product fails.

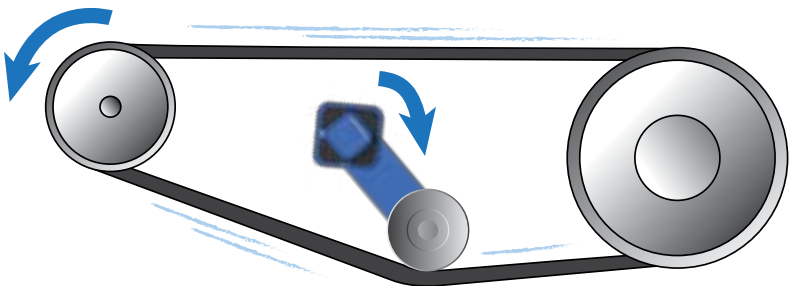
If you have any questions, contact the Lovejoy Engineering Department at 1-630-852-0500.

# Tensioner Devices

## Usage Illustrations



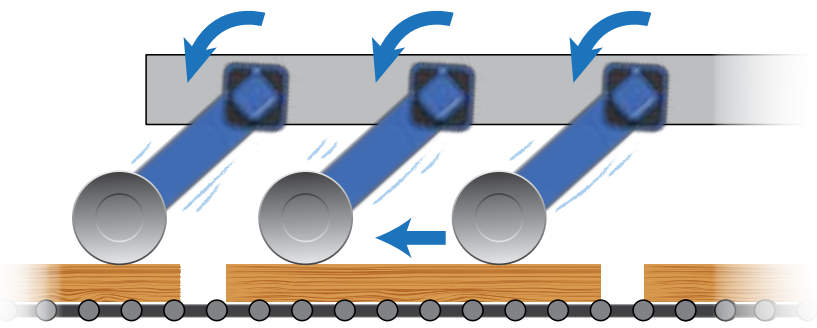
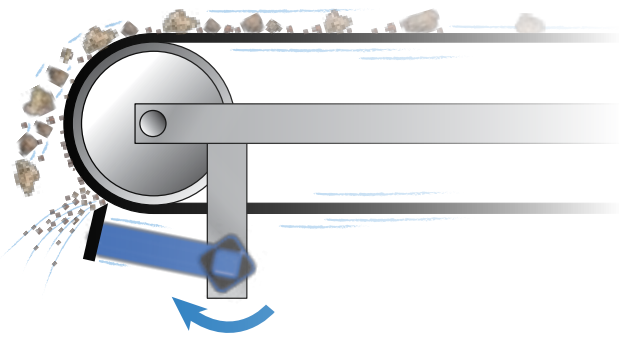
TENSIONER DEVICES



Low maintenance solution that provides a constant torque resulting in a high belt service life.



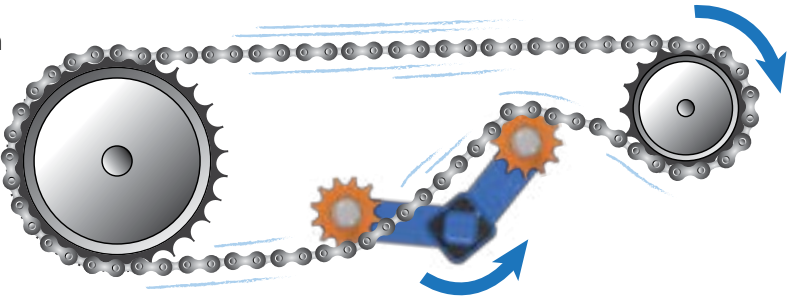
Effectively dampens belt vibrations by applying constant pressure that will continually clean conveyor belts and compensate for scraper wear.



Accurately transports product by applying constant pressure. Offers a maintenance-free and cost-effective solution while providing a long service life.

















Double-arm design provides quiet dual slack compensation and diminishes deterioration on rollers and bearing while dissipating system vibrations.





# RunRight™ Tensioner Device Selection Guide

RunRight™ Model			Application Notes	Working Temperature
Tensioner Devices				
	SE	Standard Tensioner	<b>For most Applications</b> Powder Metal / Cast Iron Housings • Cast Iron Arm & Inner Square • Painted Blue Finish • Tensys™ 10 Natural Rubber Inserts	-40° to 180°F (-40° to 80°C)
	SE-G	Oil Resistant	<b>For Oily Applications</b> Powder Metal / Cast Iron Housings • Cast Iron Arm & Inner Square • Galvanized Zinc Finish • Tensys™ 20 Synthetic Rubber Inserts • Marked with yellow dot	-22° to 180°F (-30° to 80°C)
	SE-W	Heat Resistant	<b>For Applications in excess of 180°F (80°C)</b> Powder Metal / Cast Iron Housings • Cast Iron Arm & Inner Square • Painted Blue Finish • Tensys™ 40 Hi-Temp. Rubber Inserts • Marked with red dot	180° to 250°F (80° to 120°C)
	SE-R	Steel Reinforced lever arm	<b>For use on IC Engines and Compressors</b> Powder Metal / Cast Iron Housings • Fully Welded Steel Arm & Inner Square • Painted Blue Finish • Tensys™ 10 Natural Rubber Inserts. • Marked with white dot	-40° to 180°F (-40° to 80°C)
	SE-I	Stainless Steel (INOX)	<b>For use in food and pharmaceutical industries</b> Cast Stainless Steel Housings & Arms • Natural (uncoated) Finish • Tensys™ 10 Natural Rubber Inserts	
	SE-F	Front Mount Tensioner	<b>For applications where it is impossible to access standard mounting bolt</b> Powder Metal / Cast Iron Housings • Cast Iron Arm & Inner Square • Painted Blue Finish • Tensys™ 10 Natural Rubber Inserts	
	SE-B	Double Arm Tensioner	<b>For the tensioning of very long chain and belt drives</b> Powder Metal / Cast Iron Housings • Cast Iron Arm & Inner Square • Painted Blue Finish • Tensys™ 10 Natural Rubber Inserts	
	DAT	Dual Arm Tensioner	<b>For applications requiring very high tensioning forces</b> Cast Iron Housings • Fully Welded Steel Arm & Inner Square • Painted Blue Finish • Tensys™ 10 Natural Rubber Inserts	
	PT	Plastic Tensioner	<b>For light duty applications</b> Plastic Arms & Base • Dual Arm Design • Tensys™ 10 Natural Rubber Inserts	-22° to 120°F (-30° to 50°C)
	LJ	Large Tensioner	<b>For very large HD applications</b> Dual Arm Design • Wide Range of Rollers and Sprockets Available • Based on the tensioning motorbase frame • Tensys™ 30 Natural Rubber Inserts	-40° to 180°F (-40° to 80°C)
Chain Drive Accessories				
	Sprocket Wheel Set		<b>Allows easy &amp; accurate chain alignment</b> Permanently lubricated Ball Bearings • Sets include idler hardware	-40° to 210°F (-40° to 100°C)
	Sprocket Wheel Only			
	Chain Rider Set		<b>Allows easy &amp; accurate chain alignment</b> For smooth & quiet chain tensioning • Maximum allowed chain speed 1.5 m/sec. • Material: POM-H	
	Chain Rider Only			
Belt Drive Accessories				
	Tensioning Roller		<b>Primarily uses as backside belt tensioner</b> Also used as a material feed hold-down • Available in Plastic or Aluminum • Permanently lubricated Ball Bearings	-31° to 210°F (-35° to 100°C)
	Steel Idler Pulleys		<b>Pulleys for inside and backside tensioning of V-belts</b> Flat Belt or Chain Idler Pulley for backside tensioning • Permanently lubricated Ball Bearings	-40° to 210°F (-40° to 100°C)

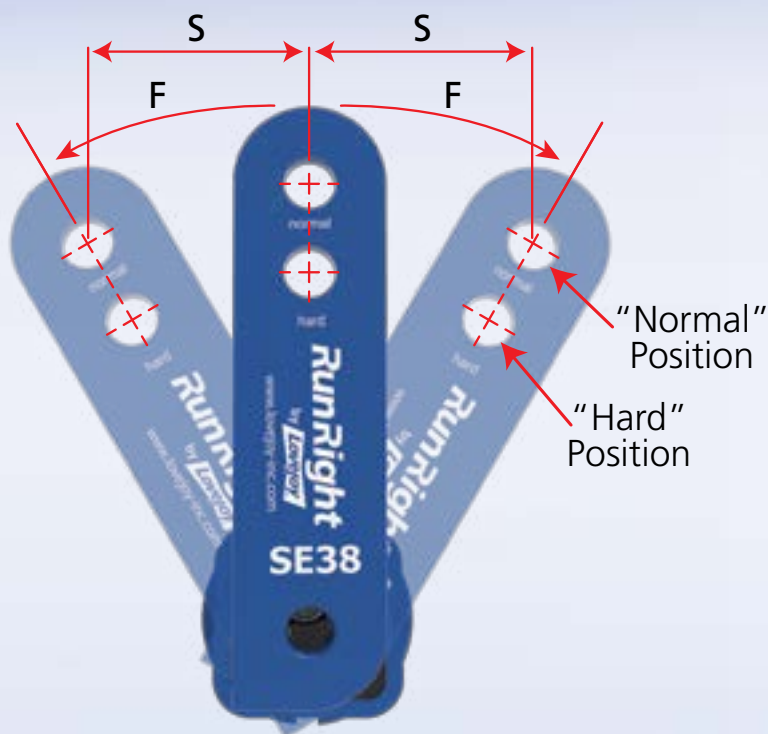
# RunRight™ Tensioner Devices

## Tensioner Technology

Install RunRight™ tensioners on a rigid, flat and clean machine surface using the mounting bolt provided. The frictional contact between the tensioner housing and the machine surface is usually sufficient for proper installation. If the surface of the machine is uneven or highly corroded, a locking pin can be used at the positioning notch for a secure connection to a machine's irregular surface.

## Tensioning Force

The tensioning force of the RunRight tensioner can be continuously adjusted. The maximum installation tensioning torque is 30° from the neutral position. The tensioning forces for the SE, SE-G, SE-R, SE-F and SE-I using the normal hole on the tensioner arm for the idler sprocket, chain and roller accessories are in the chart below. When using the hard hole on the tensioner arm, the tensioning force will increase by approximately 25% from what is shown in this chart.



Tensioner Size	Tensioning Force @ "Normal" Position											
	10° Pre-Tensioning Angle				20° Pre-Tensioning Angle				30° Pre-Tensioning Angle			
	F (n)	F (lbs)	S (mm)	S (in)	F (n)	F (lbs)	S (mm)	S (in)	F (n)	F (lbs)	S (mm)	S (in)
11	15	3.4	14	0.6	40	9.0	28	1.1	80	18.0	40	1.6
15	25	5.6	17	0.7	65	14.6	34	1.3	135	30.3	50	2.0
18	75	16.9	17	0.7	180	40.5	34	1.3	350	78.7	50	2.0
27	150	33.7	22	0.9	380	85.4	44	1.7	800	179.8	65	2.6
38	290	65.2	30	1.2	730	164.1	60	2.4	1500	337.2	87	3.4
45	500	112.4	39	1.5	1300	292.3	78	3.1	2600	584.5	112	4.4
50	750	168.6	43	1.7	2150	483.3	86	3.4	4200	944.2	125	4.9

Notes: ■ SE-I 40 same tensioner force as SE38. ■ SE-W tensioners approximately 40% lower tensioning forces as the standard SE Tensioners.

■ Mounting accessories into the "Hard" Position results in approximately 25% Higher Tensioning force over "Normal" Position.

Mounting Bolt Tightening Torque		
Size	Grade 8.8	Grade 12.9 shipped with SE-F
M6	10 Nm	17 Nm
M8	25 Nm	41 Nm
M10	49 Nm	83 Nm
M12	86 Nm	145 Nm
M16	210 Nm	355 Nm
M20	410 Nm	690 Nm
M24	750 Nm	—

Rubber Characteristics				
Rubber Compounds	Torque & Load Factor*	Operating Temperature F° (C°)	Rubber Type	Rubber Characteristics
Tensys™ 10	1.0	-40° to 180° (-40° to 80°)	Natural	Standard
Tensys™ 20	approximately 1.0	-22° to 195° (-30° to 90°)	Neoprene	Oil Resistant
Tensys™ 30	approximately 1.0	-40° to 180° (-40° to 80°)	Natural	High-Dampening (motorbases only)
Tensys™ 40	approximately 0.6	180° to 250° (80° to 120°)	EPDM	High Temperature Resistant
Tensys™ 50	approximately 3.0	-31° to 195° (-35° to 90°)	Urethane	High Torque

Note: ■ \*Factor in relation to torque & loads shown on standard selection charts.

# Tensioner Devices

## SE, SE-G, SE-W, SE-R (Imperial)

### RunRight™ Tensioners Type SE, SE-G, SE-W, SE-R

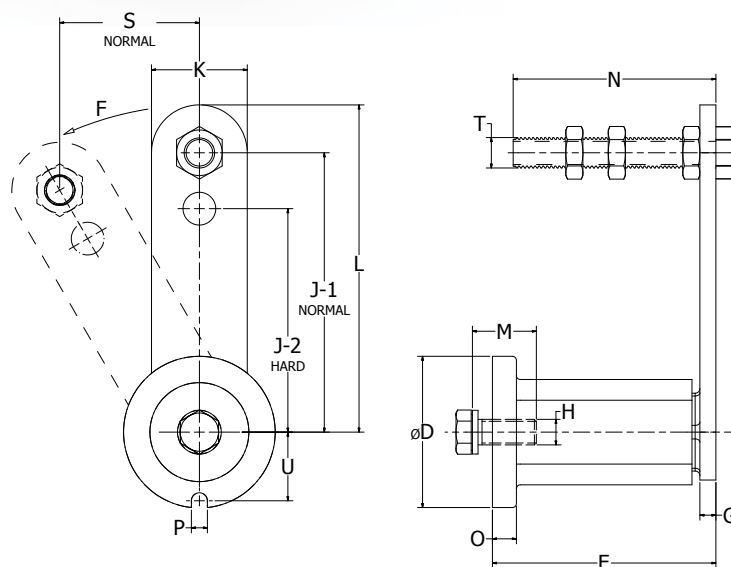
RunRight™ SE tensioners offer a full range of belt and chain tensioners. They are manufactured with the standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.

RunRight SE-G tensioners are manufactured with galvanized powder metal parts and are designed for outdoor or oily applications. The Tensys 20 neoprene inserts are oil resistant and can be used for applications operating within a -22° to 195°F (-30° to 90°C) temperature range.

RunRight SE-W tensioners enable a reduction of tensioning force of up to 40% when compared to the SE and SE-G tensioners. The Tensys 40 heat resistant rubber inserts are ideal for applications operating within a 180° to 250°F (80° to 120°C) temperature range.

RunRight SE-R tensioners are for use on internal combustion engines and compressors. They are manufactured with powder metal or cast iron housings, fully welded steel arms and inner square, come with the standard Tensys 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.

The SE11 to SE27 housings are manufactured from powder metal, anything larger is manufactured out of cast iron. All arms and inner squares are cast iron. All of the tensioners include a zinc plated mounting screw and locking washer.



**Tensioners Type SE, SE-G, SE-W, SE-R (includes Imperial Idler Hardware)**

UPC #	Type	Dimensions - Inches													
		D	E	G	H	J-1	J-2	K	L	M	N	O	P	T	U
68514417451	SE11	1.38	2.01	0.20	M6	3.15	2.36	0.79	3.54	20mm	2.00	0.24	0.31	3/8-16	0.65
68514426709	SE-G 11														
68514417452	SE15														
68514425597	SE-G 15														
68514457517	SE-W 15	1.77	2.52	0.20	M8	3.94	3.15	0.98	4.43	25mm	2.00	0.31	0.33	1/2-13	0.82
68514483883	SE-R 15														
68514417453	SE18														
68514417490	SE-G 18														
68514453285	SE-W 18	2.28	3.11	0.24	M10	3.94	3.15	1.18	4.53	30mm	2.50	0.41	0.33	1/2-13	1.00
68514483881	SE-R 18														
68514417454	SE27														
68514417491	SE-G 27														
68514453287	SE-W 27	3.07	4.25	0.31	M12	5.12	3.94	1.97	6.10	40mm	3.50	0.59	0.41	1/2-13	1.35
68514481601	SE-R 27														
68514417455	SE38														
68514417492	SE-G 38														
68514453289	SE-W 38	3.74	5.51	0.39	M16	6.89	5.51	2.36	8.07	40mm	5.00	0.59	0.49	3/4-10	1.65
68514417456	SE45														
68514417493	SE-G 45														
68514453291	SE-W 45														
68514453341	SE50	5.12	8.27	0.79	M24	9.84	7.87	3.15	11.42	60mm	6.00	0.79	0.67	3/4-10	2.26
68514463652	SE-G 50														
68514457519	SE-W 50														

Note: ■ See pages 11 and 12 for additional product and performance data.



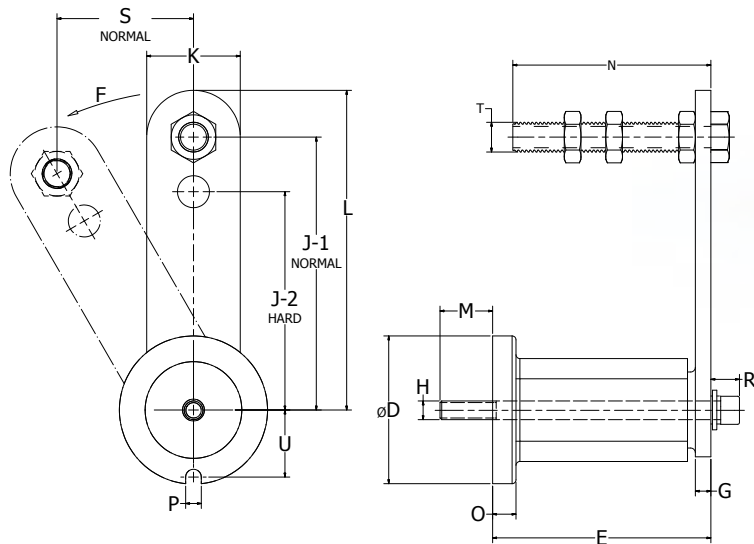
# Tensioner Devices

## SE-F (Imperial)

**RunRight™**  
by **Lovejoy**

### RunRight™ Tensioners Type SE-F (Front Mount)

RunRight™ SE-F tensioners are designed for front mounting applications where access to back side or rear mounting surfaces is not possible. A single threaded hole is required to mount these tensioners. These tensioners include a special mounting screw and spacer bushing. They are manufactured with powder metal or cast iron housings, cast iron arms and inner square, come with the standard Tensys™ 10 rubber inserts, and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



### Tensioners Type SE-F (includes Imperial Idler Hardware)

UPC #	Type	Dimensions - Inches														
		D	E	G	H	J-1	J-2	K	L	M	N	O	P	R	T	U
68514453273	SE-F 15	1.77	2.52	0.20	M6	3.94	3.15	0.98	4.43	0.47	2.00	0.31	0.33	0.39	1/2-13	0.82
68514453275	SE-F 18	2.28	3.11	0.24	M8	3.94	3.15	1.18	4.53	0.71	2.50	0.41	0.33	0.43	1/2-13	1.00
68514453277	SE-F 27	3.07	4.25	0.31	M10	5.12	3.94	1.97	6.10	0.67	3.50	0.59	0.41	0.59	1/2-13	1.35
68514453279	SE-F 38	3.74	5.51	0.39	M12	6.89	5.51	2.36	8.07	0.63	5.00	0.59	0.49	0.67	3/4-10	1.65
68514453281	SE-F 45	4.53	7.87	0.47	M16	8.86	7.09	2.76	10.24	1.26	6.00	0.71	0.49	0.94	3/4-10	2.05
68514453283	SE-F 50	5.12	8.27	0.79	M20	9.84	7.87	3.15	11.42	0.90	6.00	0.79	0.67	1.06	3/4-10	2.26

Notes: ■ Front Mounting versions of RunRight™ Series SE-G, SE-W and SE-I Tensioners are available for special requests.

■ See pages 11 and 12 for additional product and performance data.

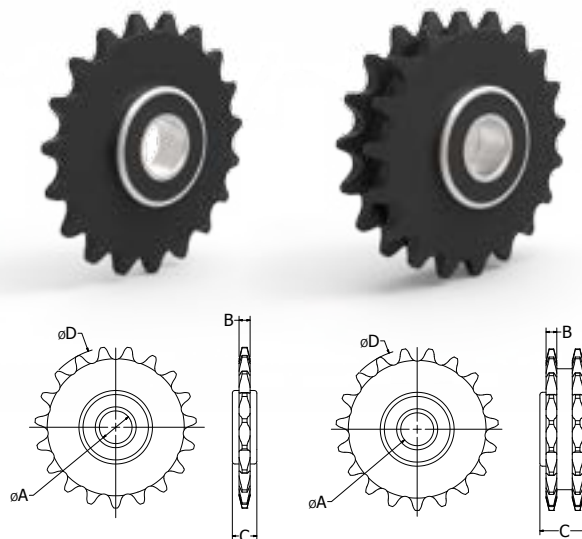
### RunRight™ Single and Double Strand Sprockets

#### Single Strand Sprockets

UPC #	Type	Dimensions - Inches					Use with Tensioner Size
		A	B	C	D	# Teeth	
68514417458	25BB20	0.38	0.11	0.38	1.72	20	SE11
68514417459	35BB19	0.50	0.17	0.44	2.48	19	SE15/18
68514417460	40BB18	0.50	0.28	0.44	3.14	18	SE15/18
68514417461	41BB18	0.50	0.23	0.44	3.14	18	SE15/18
68514417462	50BB17	0.50	0.34	0.44	3.72	17	SE27
68514417463	60BB15	0.50	0.46	0.44	3.98	15	SE27
68514417464	80BB12	0.75	0.58	0.44	4.34	12	SE38
68514417465	100BB11	0.75	0.68	0.69	5.00	11	SE45
68514417466	120BB9	0.75	0.92	1.00	5.02	9	SE45

#### Double Strand Sprockets

UPC #	Type	A	B	C	D	# Teeth	Use with Tensioner Size
68514417467	D35BB19	0.50	0.16	0.44	2.48	19	SE15/18
68514417468	D40BB18	0.50	0.28	0.44	3.14	18	SE18
68514417469	D50BB17	0.50	0.33	0.44	3.72	17	SE27
68514417470	D60BB15	0.50	0.46	0.44	3.98	15	SE27
68514417471	D80BB12	0.75	0.58	0.44	4.34	12	SE38
68514443442	D100BB11	0.75	0.68	0.69	5.00	11	SE45



# Tensioner Devices

## SE, SE-G, SE-W, SE-I (Metric)

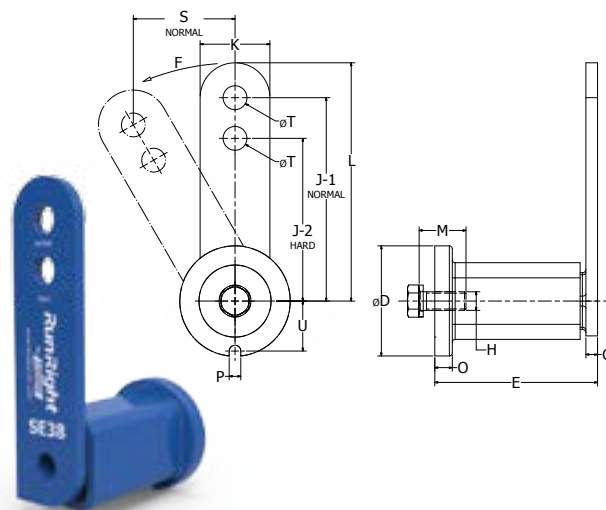
### RunRight™ Tensioners Type SE, SE-G, SE-W (Metric)

RunRight™ SE tensioners offer a full range of belt and chain tensioners. They are manufactured with the standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.

RunRight SE-G tensioners are manufactured with galvanized powder metal parts and are designed for outdoor or oily applications. The Tensys 20 neoprene inserts are oil resistant and can be used for applications operating within a -22° to 195°F (-30° to 90°C) temperature range.

RunRight SE-W tensioners enable a reduction of tensioning force of up to 40% when compared to the SE and SE-G tensioners. The Tensys 40 heat resistant rubber inserts are ideal for applications operating within a 180° to 250°F (80° to 120°C) temperature range.

The SE11 to SE27 housings are manufactured from powder metal, anything larger is manufactured out of cast iron. All arms and inner squares are cast iron. All of the tensioners include a zinc plated mounting screw and locking washer.



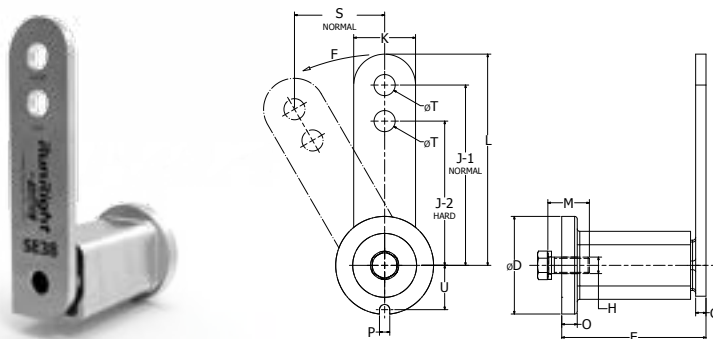
**Tensioners Type SE, SE-G, & SE-W for Metric Idler Hardware**

UPC #	Type	Dimensions - Millimeters													
		D	E	G	H	J-1	J-2	K	L	M	N	O	P	T	U
68514485264	SE11-M	35	51	5	M6	80	60	20	90.0	20	22	6.0	8.0	8.5	16.5
68514485257	SE-G 11-M														
68514485265	SE15-M														
68514485258	SE-G 15-M														
68514485271	SE-W 15-M	45	64	5	M8	100	80	25	112.5	25	30	8.0	8.5	10.5	20.8
68514485266	SE18-M														
68514485259	SE-G 18-M														
68514485272	SE-W 18-M														
68514485267	SE27-M	58	79	7	M10	100	80	30	115.0	30	35	10.5	8.5	10.5	25.3
68514485260	SE-G 27-M														
68514485273	SE-W 27-M														
68514485268	SE38-M														
68514485261	SE-G 38-M	78	108	8	M12	130	100	50	155.0	40	52	15.0	10.5	12.5	34.3
68514485274	SE-W 38-M														
68514485269	SE45-M														
68514485262	SE-G 45-M														
68514485275	SE-W 45-M	95	140	10	M16	175	140	60	205.0	40	66	15.0	12.5	20.5	42.0
68514485270	SE50-M														
68514485263	SE-G 50-M														
68514485276	SE-W 50-M														

Note: ■ See pages 11 and 12 for additional product and performance data.

### RunRight™ Tensioners Type SE-I

RunRight SE-I tensioners are for use in the food and pharmaceutical industries. They are manufactured with cast stainless steel housings, arms and inner square. They come with the standard Tensys 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



**Tensioners Type SE-I (INOX) (Stainless Steel) for Metric Idler Hardware**

UPC #	Type	Dimensions - Millimeters													
		D	E	G	H	J-1	J-2	K	L	M	N	O	P	T	U
68514485681	SE-I 11	35	51	5	M6	80	60	20	90.0	20	22	6.0	8.0	8.5	16.5
68514463014	SE-I 15	45	64	5	M8	100	80	25	112.5	25	30	8.0	8.5	10.5	20.8
68514463015	SE-I 18	58	79	7	M10	100	80	30	115.0	30	35	10.5	8.5	10.5	25.3
68514463016	SE-I 27	78	108	8	M12	130	100	50	155.0	40	52	15.0	10.5	12.5	34.3
68514463017	SE-I 40	100	140	10	M16	175	140	70	205.0	40	66	15.0	12.5	20.5	41.5

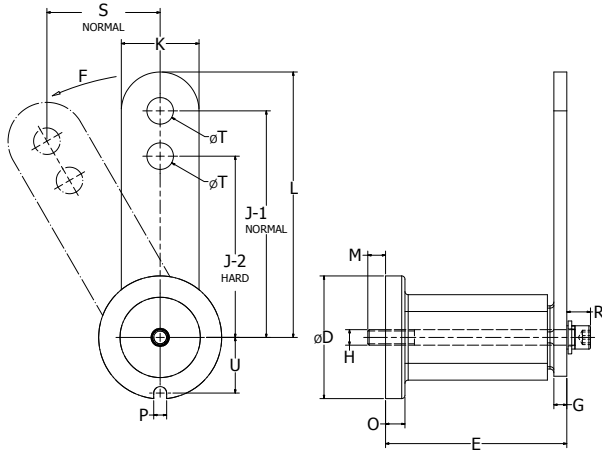
# Tensioner Devices

## SE-F (Metric)



### RunRight™ Tensioners Type SE-F (Front Mount)

RunRight™ SE-F tensioners are designed for front mounting applications where access to back side or rear mounting surfaces is not possible. A single threaded hole is required to mount these tensioners. These tensioners include a special mounting screw and spacer bushing. They are manufactured with powder metal or cast iron housings, cast iron arms and inner square, come with the standard Tensys™ 10 rubber inserts, and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.

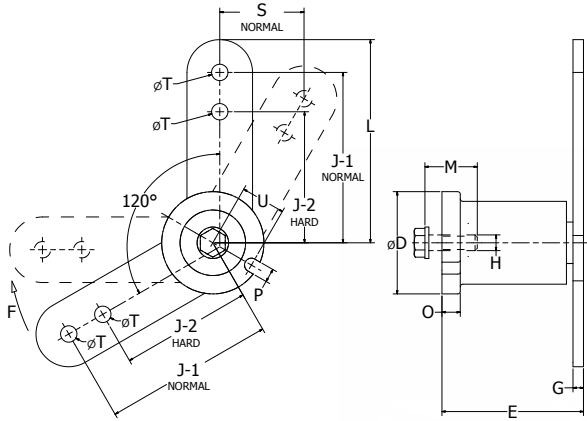


TENSIONER DEVICES

Tensioners Type SE-F (for use with metric Idler Hardware)														
UPC #	Type	Dimensions - Millimeters												
		D	E	G	H	J-1	J-2	K	L	M	O	P	R	U
68514485026	SE-F 15-M	45	64	5	M6	100	80	25	112.5	12	8.00	8.5	10	20.8
68514485027	SE-F 18-M	58	79	7	M8	100	80	30	115.0	18	10.5	8.5	11	25.3
68514485028	SE-F 27-M	78	108	8	M10	130	100	50	155.0	17	15.0	10.5	15	34.3
68514485029	SE-F 38-M	95	140	10	M12	175	140	60	205.0	16	15.0	12.5	17	42.0
68514485030	SE-F 45-M	115	200	12	M16	225	180	70	260.0	32	18.0	12.5	24	52.0
68514485031	SE-F 50-M	130	210	20	M20	250	200	80	290.0	23	20.0	17.0	27	57.5

### RunRight™ Tensioners Type SE-B

RunRight SE-B tensioners are designed for longer length chain drive applications. They are manufactured with powder metal or cast iron housings, cast iron arms and inner squares, come with the standard Tensys 10 rubber inserts, and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Tensioners Type SE-B (for use with metric Idler Hardware)														
UPC #	Type	Dimensions - Millimeters												
		D	E	G	H	J-1	J-2	K	L	M	O	P	T	U
68514463729	SE-B 18	58	78	6	M10	100	80	30	115	30	35	10.5	10.5	25.3
68514463730	SE-B 27	78	108	8	M12	130	100	50	155	40	52	10.5	12.5	34.3

Note: ■ See pages 11 and 12 for additional product and performance data.

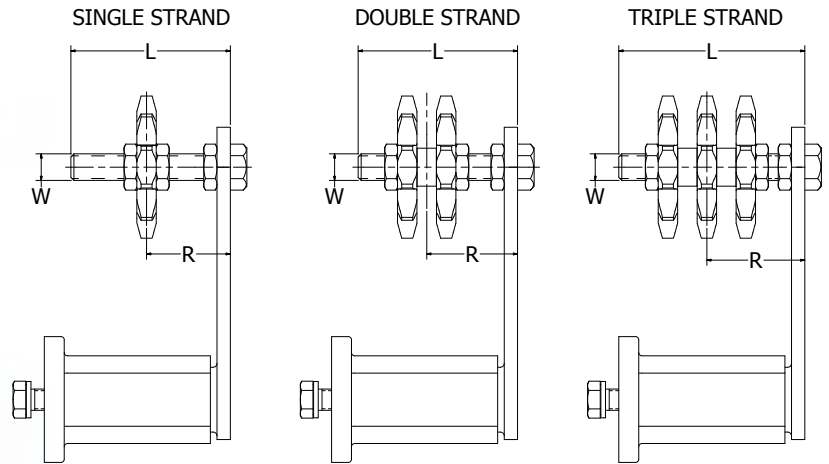


# Tensioner Devices

## Accessories - Sprockets

### RunRight™ Idler Sprockets

Ball Bearing Idler Sprockets are available for ANSI #35 through #120 roller chains for single, double and triple strand drives. The bearings are self-lubricating and double sealed for longer life. Available in sets (includes idler bolt & nuts) and as individual components.



#### ANSI Single Strand Sprocket Sets

UPC #	Type	Pitch	ANSI Chain	Dimensions - Millimeters					Tensioner Size
				W	L	R Adjusting Range		# Teeth	
68514484965	25BB20 M8 SET	1/4"	#25	M8	45	18	- 36	20	SE11-M
68514484966	35BB19 M10 SET	3/8"	#35	M10	55	22	- 43	19	SE15-M
68514484967	40BB18 M10 SET	1/2"	#40	M10	55	23	- 44	18	SE15/18-M
68514484968	41BB18 M10 SET	1/2"	#41	M10	55	23	- 44	18	SE15/18-M
68514484969	50BB17 M12 SET	5/8"	#50	M12	80	27	- 65	17	SE27-M
68514484970	60BB15 M12 SET	3/4"	#60	M12	80	40	- 80	15	SE27-M
68514484971	60BB15 M20 SET	3/4"	#60	M20	100	40	- 80	15	SE38-M
68514484972	80BB12 M20 SET	1"	#80	M20	100	40	- 80	12	SE38-M
68514484973	100BB11 M20 SET	1-1/4"	#100	M20	100	40	- 80	11	SE45-M
68514484974	120BB9 M20 SET	1-1/2"	#120	M20	140	40	- 120	9	SE45-M

#### ANSI Double Strand Sprocket Sets

68514484975	D35BB19 M10 SET	3/8"	#35	M10	55	27	- 39	19	SE15-M
68514484976	D40BB18 M10 SET	1/2"	#40	M10	55	30	- 37	18	SE15/18-M
68514484978	D50BB17 M12 SET	5/8"	#50	M12	80	36	- 57	17	SE27-M
68514484979	D60BB15 M12 SET	3/4"	#60	M12	80	37	- 56	15	SE27-M
68514484980	D60BB15 M20 SET	3/4"	#60	M20	120	50	- 90	15	SE38-M
68514484981	D80BB12 M20 SET	1"	#80	M20	120	55	- 84	12	SE38-M
68514484982	D100BB11 M20 SET	1-1/4"	#100	M20	140	60	- 102	11	SE45-M
68514484983	D120BB9 M20 SET	1-1/2"	#120	M20	140	65	- 97	9	SE45-M

#### ANSI Triple Strand Sprocket Sets

68514484984	T35BB19 M10 SET	3/8"	#35	M10	70	33	- 48	19	SE18-M
68514484985	T40BB18 M10 SET	1/2"	#40	M12	80	41	- 51	18	SE27-M
68514484987	T50BB17 M12 SET	5/8"	#50	M12	80	43	- 50	17	SE27-M
68514484988	T60BB15 M12 SET	3/4"	#60	M12	120	56	- 84	15	SE27-M
68514484989	T60BB15 M20 SET	3/4"	#60	M20	120	59	- 80	15	SE38-M
68514484990	T80BB12 M20 SET	1"	#80	M20	160	74	- 108	12	SE45-M
68514484991	T100BB11 M20 SET	1-1/4"	#100	M20	160	78	- 105	11	SE45/50-M
68514484992	T120BB9 M20 SET	1-1/2"	#120	M20	180	90	- 111	9	SE45/50-M

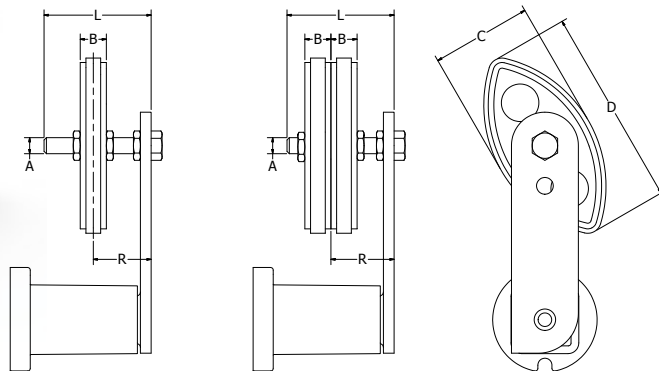
# Tensioner Devices

## Accessories - Chain Drives

**RunRight™**  
by **Lovejoy**

### RunRight™ Chain Riders

The RunRight™ chain rider is made from high strength industrial polymers and are shaped for use on either side of the rider. For use with chain speeds of 5 ft/sec or less, the chain riders provide an economical and quieter solution than sprockets. Available in sets (includes idler bolt and nuts) or individually.



#### ANSI Single Strand Chain Rider Sets

UPC #	Type	Pitch	ANSI Chain	Dimensions - Millimeters					Adjusting Range R			Tensioner Size
				A	B	C	D	L	Simplex			
68514463941	P3/8-8AS SET	3/8"	#35	M8	10.0	40	73	45	19	-	34	SE11
68514457726	P3/8-11AS SET	1/2"	#41	3/8"	10.0	40	73	2"	19	-	34	SE11
68514453094	P1/2-10AS SET	1/2"	#40	M10	13.9	50	96	55	23	-	41	SE15 & SE18
68514443499	P5/8-10AS SET	5/8"	#50	M10	16.6	65	126	55	24	-	39	SE15 & SE18
68514443387	P3/4-12AS SET	3/4"	#60	M12	19.5	75	148	80	30	-	61	SE27

#### ANSI Double Strand Chain Rider Sets

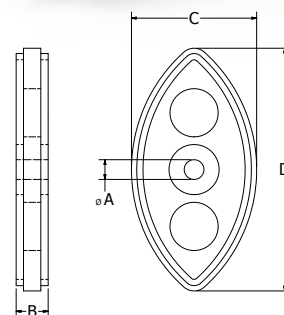
UPC #	Type	Pitch	ANSI Chain	Dimensions - Millimeters					Adjusting Range R			Tensioner Size
				A	B	C	D	L	Duplex			
68514463653	P3/8-8AD SET	3/8"	#35	M8	10.0	40	73	45	25	-	30	SE11
68514463654	P1/2-10AD SET	1/2"	#40	M10	13.9	50	96	55	30	-	34	SE15 & SE18
68514463655	P5/8-10AD SET	5/8"	#50	M10	16.6	65	126	70	34	-	46	SE15 & SE18
68514463656	P3/4-12AD SET	3/4"	#60	M12	19.5	75	148	80	40	-	52	SE27

#### ANSI Chain Riders Only - Metric Bore

UPC #	Type	Pitch	ANSI CHAIN	Dimensions - Millimeters				For Idler Bolt	Tensioner Size
				A	B	C	D		
68514485104	P3/8-8AS	3/8"	#35 / #41	8.2	10.0	40	73	M8	SE11
68514485105	P1/2-10AS	1/2"	#40	10.2	13.9	50	96	M10	SE15 & SE18
68514485106	P5/8-10AS	5/8"	#50	10.2	16.6	65	126	M10	SE15 & SE18
68514485107	P3/4-12AS	3/4"	#60	12.2	19.5	75	148	M12	SE27

#### ANSI Chain Riders Only - Inch Bore

UPC #	Type	Pitch	ANSI CHAIN	Dimensions - Millimeters				For Idler Bolt	Tensioner Size
				A	B	C	D		
68514485253	P3/8-3/8AS	3/8"	#35 / #41	9.5	10.0	40	73.0	3/8"	SE11
68514485254	P1/2-1/2AS	1/2"	#40	12.7	13.9	50	96.0	1/2"	SE15 & SE18
68514485255	P5/8-1/2AS	5/8"	#50	12.7	16.6	65	126.0	1/2"	SE15 & SE18
68514485256	P3/4-1/2AS	3/4"	#60	12.7	19.5	75	148.0	1/2"	SE27
68514483303	P1-3/4AS	1"	#80	19.1	25.4	90	183.0	3/4"	SE38
68514480055	P1-1/4-3/4AS	1-1/4"	#100	19.1	31.8	111	228.6	3/4"	SE38 & SE45

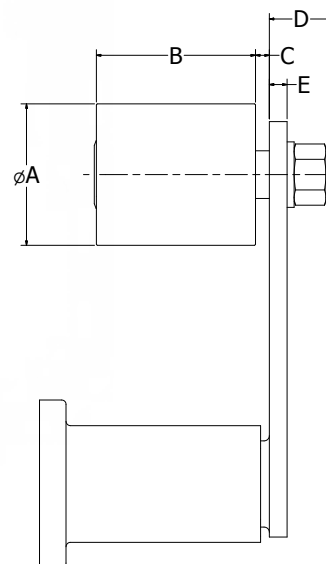


# Tensioner Devices

## Accessories - Belt Drives

### RunRight™ Tensioning Rollers

The RunRight™ tensioning roller is primarily used as a back-side belt tensioner. The rollers are available in either plastic or aluminum. The bearings are self-lubricating for longer life. The rollers can be used for applications operating within a -31° to 212°F (-35° to 100°C) temperature range.



Plastic Rollers									
UPC #	Type	Max RPM	Dimensions - Millimeters						Use with Tensioner Size
			A	B	C	D	E	F	
68514463115	R11	8000	30	35	2	14	5	M8	SE11-M
68514453028	R15/18	8000	40	45	6	21	8	M10	SE15 & SE18-M
68514443023	R27	6000	60	60	7	21	8	M12	SE27-M
68514457573	R38	5000	80	90	8	36	10	M16	SE38-M
68514457574	R45	4500	90	130	10	46	20	M20	SE45-M

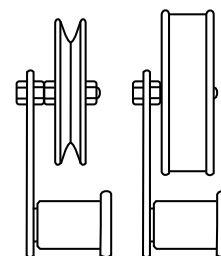
  

Aluminum Rollers									
UPC #	Type	Max RPM	Dimensions - Millimeters						Use with Tensioner Size
			A	B	C	D	E	F	
68514484323	R11-AL	15000	30	35	2	14	5	M8	SE11-M
68514484324	R15/18-AL	15000	40	45	6	16	7	M10	SE15 & SE18-M
68514484325	R27-AL	12000	60	60	8	17	8	M12	SE27-M
68514484326	R38-AL	10000	80	90	8	25	10	M16	SE38-M
68514484327	R45-AL	8000	90	135	10	34	16	M20	SE45-M

### RunRight™ Steel Idler Pulleys

The RunRight steel idler pulley is used for the “inside” tensioning of V-belts. The bearings are self-lubricating for longer life. The rollers can be used for applications operating within a -40° to 212°F (-40° to 100°C) temperature range.

Flat Belt / Quiet Chain Idler Pulley						
UPC #	Model Number	Overall Width in	Flat Surface Width in	Pulley OD in	Bore in	Length Through Bore in
68514417472	CB4	1.44	1	4.75	0.500	0.719



V-Belt Idler Pulleys						
UPC #	Pulley Number	Belt Size	Pitch in	Pulley OD in	Bore in	Length Through Bore in
68514417473	A3	A	2.50	3.00	0.375	0.844
68514417474	B5	B-C	3.75	5.06	0.500	0.719
68514417475	B7	B-C	6.00	7.31	0.500	0.719



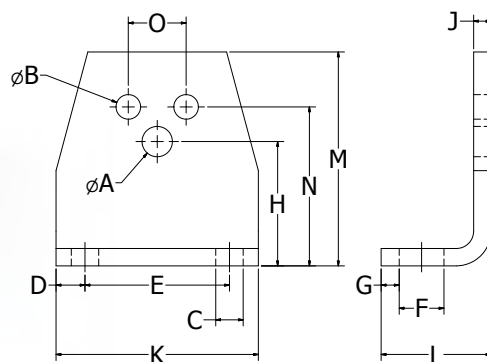
# Tensioner Devices

## Accessories - WS Brackets, Safety Sockets

**RunRight™**  
by **Lovejoy**

### RunRight™ WS Brackets

The RunRight™ WS Bracket offers an easy assembly to equipment for the SE tensioners by attaching to the housing using the mounting bolt. The base of the bracket can be positioned in either direction.

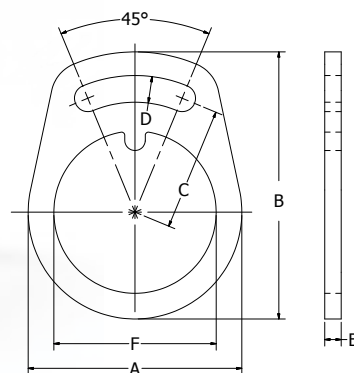


#### WS Brackets

WS Bracket		Fit for SE Tensioners		Fit for DR-A, DK-A, and DW-A		Dimensions - Millimeters											
UPC #	Type	SE Size	Dimensions - Millimeters		Element Size	Dimensions - Millimeters											
			A	H		B	N	O	C	D	E	F	G	J	K	L	M
68514425200	WS11-15	11	6.5	27	15	5.5	35	10	7.0	7.5	30	13.0	11.5	4	45	30	46
68514425201	WS15-18	15	8.5	34	18	6.5	44	12	7.0	7.5	40	13.0	13.5	5	55	32	58
68514425202	WS18-27	18	10.5	43	27	8.5	55	20	9.5	10.0	50	15.5	16.5	6	70	38	74
68514425203	WS27-38	27	12.5	57	38	10.5	75	25	11.5	12.5	65	21.5	21.0	8	90	52	98
68514425204	WS38-45	38	16.5	66	45	12.5	85	35	14.0	15.0	80	24.0	21.0	8	110	55	116
68514425205	WS45-50	45	20.5	80	50	12.5	110	40	18.0	20.0	100	30.0	26.0	10	140	66	140

### RunRight™ Safety Sockets

The RunRight Safety Socket is used for positioning the tensioner and locking it into place. It also provides the ability to adjust the tensioner angle in the future.



#### Safety Sockets

UPC #	Type	For Size SE	Dimensions - Millimeters					
			A	B	C	D	E	F
68514483288	SS27	27	104	130	60	13	8	79.0
68514483289	SS38	38	128	161	75	17	10	96.5

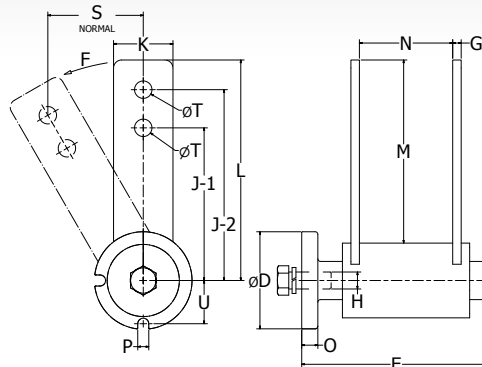


# Tensioner Devices

## DAT, PT, LJ

### RunRight™ Tensioners Type DAT (Double Arm)

RunRight™ DAT tensioners are designed for applications requiring very high tensioning forces. They are manufactured with cast iron housings and have a fully welded steel arm and inner square. They are manufactured with standard Tensys™ 10 rubber inserts, and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



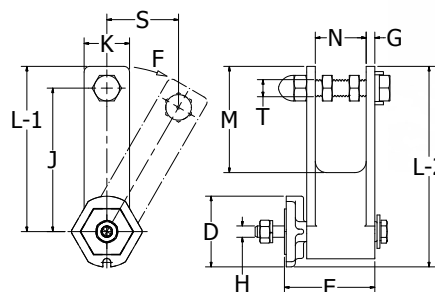
#### Tensioners Type DAT (Dual Arm Tensioner)

UPC #	Type	Dimensions - Millimeters											
		D	E	G	H	J-1	J-2	K	L	M	N	O	T
68514479412	DAT45	115	223	10	M20	180	225	70	260	215	110.00	19	1/4-20
68514417457	DAT50	150	257	10	M24	NONE*	NONE*	90	280	161	112.50	22	NONE*

Notes: ■\*The DAT50 tensioner is supplied with NO HOLES in the arms allowing the customer to attached whatever type idler shaft/bearing arrangement necessary for their application.  
 ■ Lovejoy can custom machine the arms upon request. Consult factory for quote.

### RunRight™ Tensioners Type PT (Plastic Tensioners)

RunRight PT tensioners are designed for light duty applications where an economical product choice is required. They are manufactured of glass-reinforced DuPont Zytel® Nylon with the standard Tensys 10 rubber inserts and a dual arm design. The PT tensioners are designed for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.

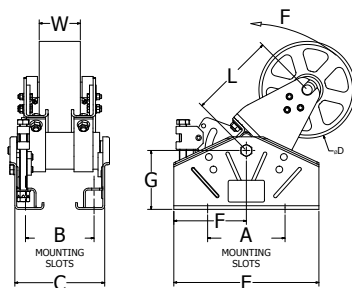


#### Tensioners Type PT (Plastic Tensioner)

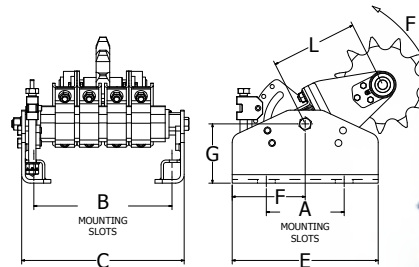
UPC #	Type	Dimensions - Inches										
		D	E	G	H	J	K	L-1	L-2	M	N	T
68514424481	PT7	1.13	1.03	0.09	M4	2.36	0.72	2.72	3.55	1.36	0.56	1/4-20
68514424416	PT11	1.56	2.03	0.18	1/4-20	3.15	1.00	3.17	4.41	1.84	1.13	3/8-16

### RunRight™ Tensioners Type LJ

RunRight LJ tensioners are manufactured with steel parts and are designed for large heavy duty applications. They are manufactured with standard Tensys 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Belt Drives



Chain Drives



#### Tensioners Type LJ50 (Large Belt Drive Tensioner)

UPC #	Type	Dimensions - Inches								
		A	B	C	D	E	F	G	L	W
68514482465	LJ50X105-4.25F10	8.00	10.00	10.00	10.00	15.00	7.50	6.09	8.90	4.25
68514484316	LJ50X270-8.25F10	8.00	13.31	16.69	10.00	15.00	7.50	6.09	10.10	8.25
68514480752	LJ50X400-14F12.25	10.71	16.69	22.81	12.25	19.29	7.50	5.90	12.66	14.00

#### Tensioners Type LJ50 (Large Chain Drive Tensioner)

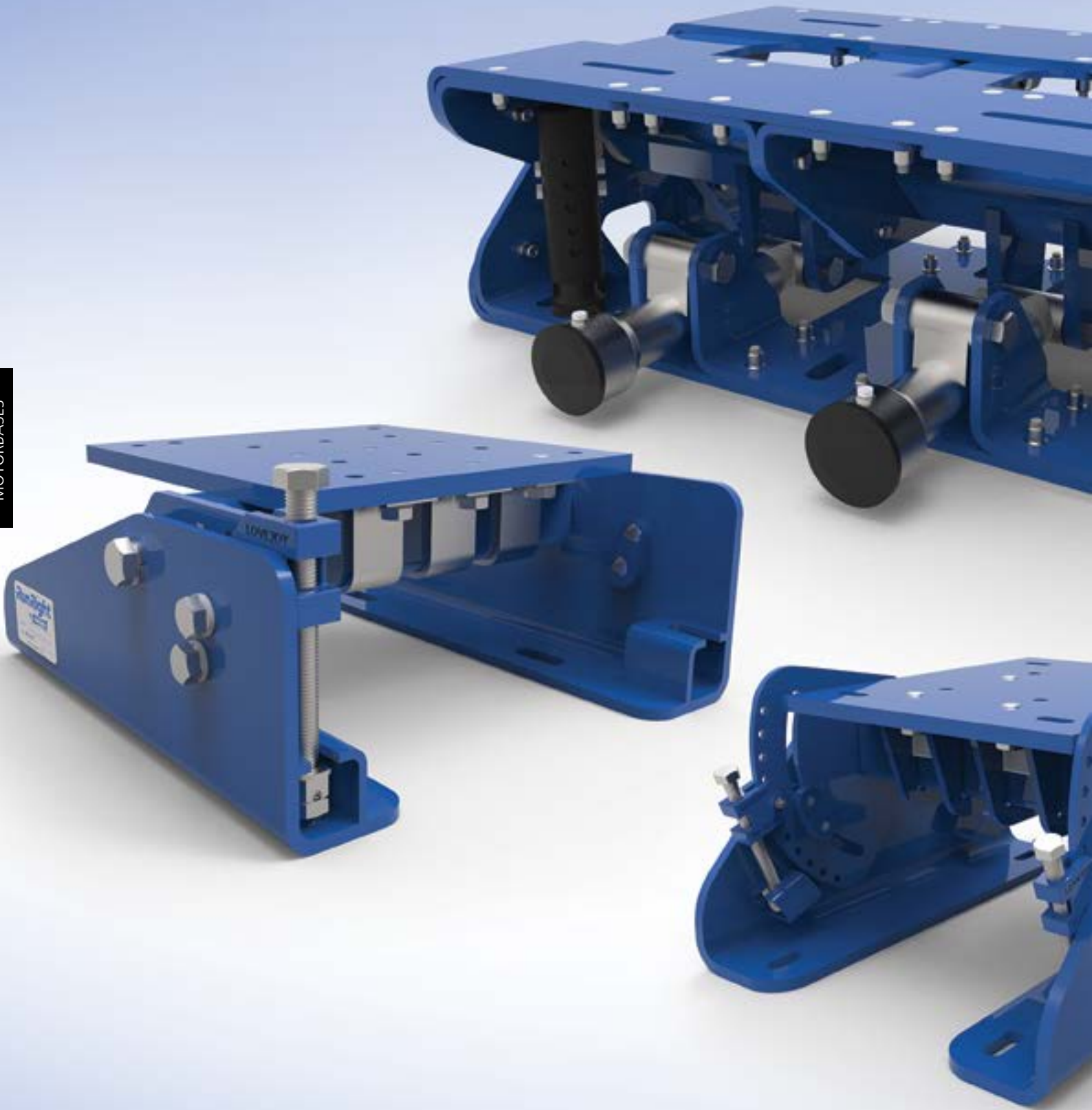
UPC #	Type	Dimensions - Inches								
		A	B	C	D	E	F	G	L	# of TEETH
68514484272	LJ50X270-180	16.00	13.31	16.69	9.01	15.00	7.50	6.09	8.90	11
68514483506	LJ50X270-200	16.00	13.31	16.69	10.02	15.00	7.50	6.09	8.90	11
68514483496	LJ50X270-D200	16.00	13.31	10.00	10.02	15.00	7.50	6.09	8.90	11
68514483500	LJ50X270-1245	16.00	13.31	16.69	—	15.00	7.05	6.09	8.90	9

Notes: ■ All Type LJ50 tensioners are made to order. ■ Consult factory for your specific needs. ■ See pages 11 and 12 for additional product and performance data.

# RunRight<sup>TM</sup>

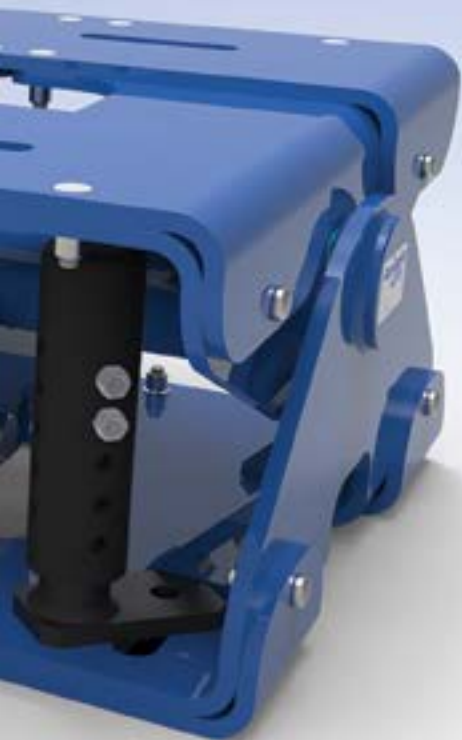
by **Lovejoy**

MOTORBASES



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# Motorbases



## Inside this section:

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## Safety Warning



When using Lovejoy products, you must follow these instructions and take the following precautions. Failure to do so may cause the power transmission product to break and parts to be thrown with sufficient force to cause severe injury or death.

Refer to this Lovejoy Catalog for proper selection, sizing, horsepower, torque range, and speed range of power transmission products, including elastomeric elements for couplings. Follow the installation instructions included with the product, and in the individual product catalogs for proper installation of power transmission products. Do not exceed catalog ratings.

Do not use any of these power transmission products for elevators, man lifts, or other devices that carry people. If the

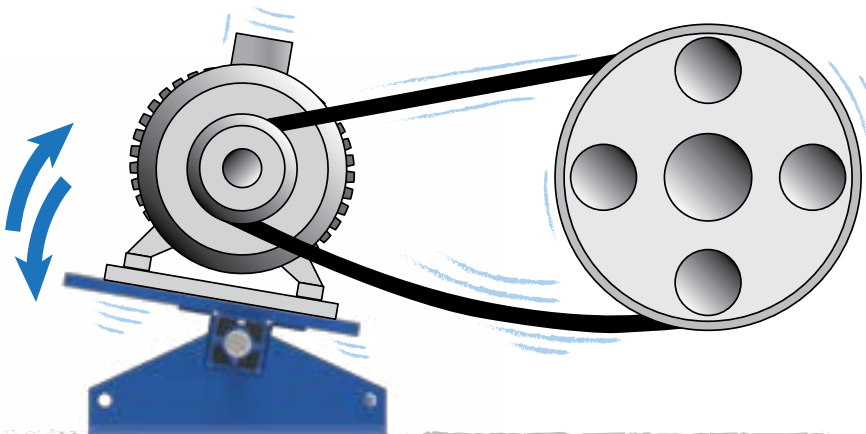
power transmission product fails, the lift device could fall resulting in severe injury or death.

For all power transmission products, you must install suitable guards in accordance with OSHA and American Society of Mechanical Engineers Standards. Do not start power transmission product before suitable guards are in place. Failure to properly guard these products may result in severe injury or death from personnel contacting moving parts or from parts being thrown from assembly in the event the power transmission product fails.

If you have any questions, contact the Lovejoy Engineering Department at 1-630-852-0500.

# Motorbases

## Usage Illustrations



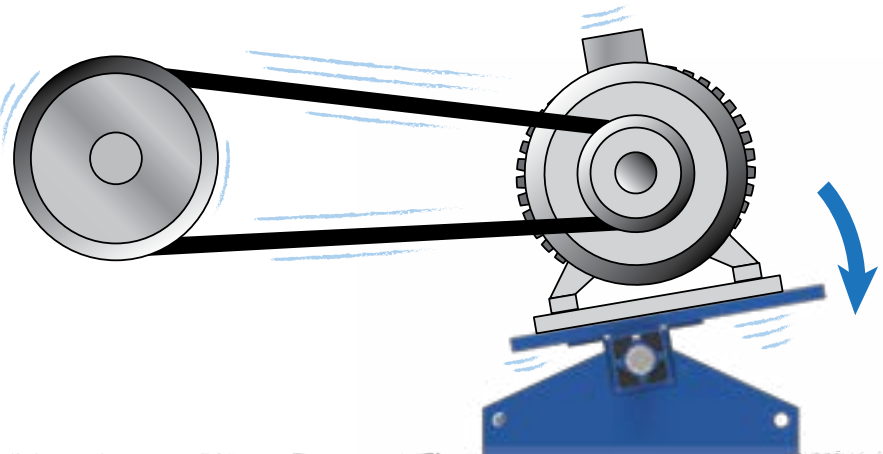
Designed specifically for starting and moving a loaded belt, absorbs the impact of material loading and provides stability for proper alignment.



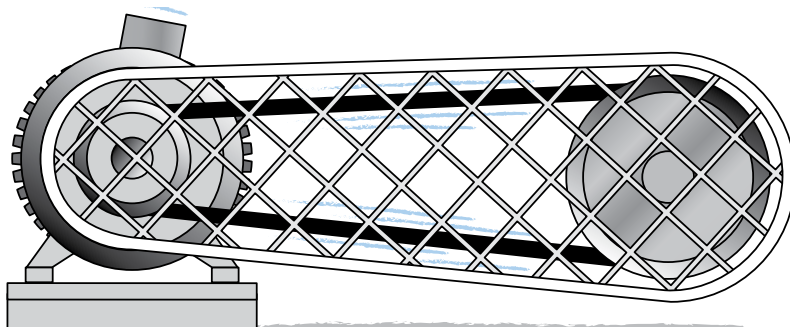
MB20

MOTORBASES

Maintenance-free tensioning motorbase provides constant torque transmission and less energy consumption increasing the life of the drive system.



MB70



In a shrouded application, the motorbase provides quiet torque transmission while continually tensioning belts.



LMB100

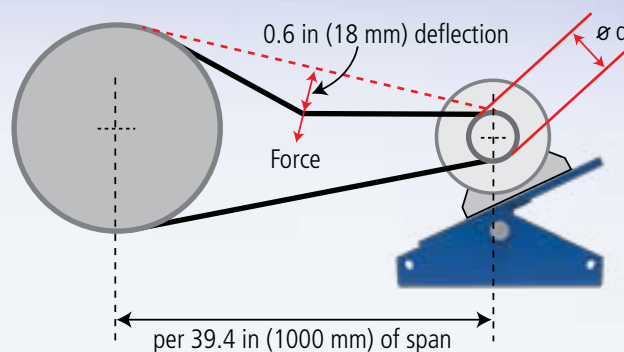


# Motorbase Technology

RunRight™ elastomeric tensioning motorbases utilize a rubber suspension unit as a pivot mount. The rubber suspension unit continuously compensates for belt stretching, hopping, fluttering and excessive pull when a drive is started. RunRight tensioning motorbases are the ideal tensioning solution for all belt drives from about 1/2 to 700 HP.

## Tensioning Force

The RunRight Motorbase is supplied with its mechanical pretensioning device at the ideal calibration of the relevant belt tension, based on the belt suppliers' test force recommendations. Common V-belt sizes and the recommended deflection forces are shown in the table below.



Recommended Belt Deflection Force Super HC: V-Belts, Powerband Belts, Molded Notched V-Belts or Molded Notched Powerband Belts					
V-Belt Cross Section	Small Sheave Diameter Range (in)	Small Sheave RPM Range	Speed Ratio Range	Recommended Deflection Force (lbs)	
				Minimum	Maximum
3VX	2.2	1200 - 3600	2.00 to 4.00	2.8	4.1
	2.4 - 2.5	1200 - 3600		3.2	4.7
	2.7 - 2.8	1200 - 3600		3.5	5.1
	3.0 - 3.2	1200 - 3600		3.8	5.5
	3.4 - 3.7	1200 - 3600		4.1	6.0
	4.1 - 5.0	900 - 3600		4.8	7.1
	5.3 - 6.9	900 - 3600		5.8	8.6
5VX	4.4 - 4.7	1200 - 3600	2.00 to 4.00	9.0	13.0
	4.9 - 5.5	1200 - 3600		10.0	15.0
	5.9 - 6.7	1200 - 3600		11.0	17.0
	7.1 - 8.0	600 - 1800		13.0	19.0
	8.5 - 10.9	600 - 1800		14.0	20.0
	11.8 - 16.0	400 - 1200		15.0	23.0
5V	7.1 - 8.0	600 - 1800	2.00 to 4.00	11.0	16.0
	8.5 - 10.9	600 - 1800		13.0	18.0
	11.8 - 16.0	400 - 1200		14.0	21.0
8V	12.5 - 17.0	600 - 1800	2.00 to 4.00	28.0	41.0
	18.0 - 24.0	400 - 900		32.0	48.0

Recommended Belt Deflection Force Hi-Power II V-Belts, Hi-Power II Powerband Belts or Tri-Power Molded Notch V-Belts							
V-Belt Cross Section	Small Sheave Diameter Range (in)	Small Sheave RPM Range	Speed Ratio Range	Recommended Deflection Force (lbs)			
				Hi-Power II		Tri-Power Molded Notch	
				Minimum	Maximum	Minimum	Maximum
A AX	3.0	1750 to 3600	2.00 to 4.00	2.7	3.8	3.8	5.4
	3.2			2.9	4.2	3.9	5.5
	3.4 - 3.6			3.3	4.8	4.1	5.9
	3.8 - 4.2			3.8	5.5	4.3	6.3
	4.6 - 7.0			4.9	7.1	4.9	7.1
B BX	4.6	1160 to 1800	2.00 to 4.00	5.1	7.4	7.1	10.0
	5.0 - 5.2			5.8	8.5	7.3	11.0
	5.4 - 5.6			6.2	9.1	7.4	11.0
	6.0 - 6.8			7.1	10.0	7.7	11.0
C CX	7.4 - 9.4	870 to 1800	2.00 to 4.00	8.1	12.0	7.9	12.0
	7.0			9.1	13.0	12.0	18.0
	7.5			9.7	14.0	12.0	18.0
	8.0 - 8.5			11.0	16.0	13.0	18.0
	9.0 - 10.5			12.0	18.0	13.0	19.0
D	11.0 - 16.0			14.0	21.0	13.0	19.0
	12.0 - 13.0	690 to 1200	2.00 to 4.00	19.0	27.0	19.0	28.0
	13.5 - 15.5			21.0	30.0	21.0	31.0
	16.0 - 22.0			24.0	36.0	25.0	36.0

# RunRight™ Motorbase Selection Guide

RunRight™ Model	Type of Motorbase	Page #	IEC			NEMA		
			Motor Frame Size	kW @ 1000 RPM (6-pole)	kW @ 1500 RPM (4-pole)	Motor Frame Size	HP @ 1200 RPM (6-pole)	HP @ 1800 RPM (4-pole)
	MB20X170	27	90S	0.8	1.1	143T	1/2	1
			90L	1.1	1.5	145T	1	1-1/2 to 2
	MB30X200	27	100L	1.5	2.2 to 3	182T	1-1/2	3
			112M	2.2	4	184T	2	5
	MB38X300	28	132S	3.0	5.5	213T	3	5 to 7-1/2
			132M	4 to 5.5	7.5	215T	5	5 to 10
			160M	7.5	11	254T	7.5	15
			160L	11	15	256T	10	15 to 20
	MB50X160	29	132S	3	5.5	213T	3	5 to 7-1/2
	MB50X200		132M	4 to 5.5	7.5	215T	5	5 to 10
			160M	7.5	11	254T	7.5	15
	MB50X270		160L	11	15	256T	10	15 to 20
			180M	—	18.5	284T	15	25
	MB50X400		180L	15.0	22	286T	20	30
			200M	18.5	30	324T	25	40
	200L		22	326T		30	50	
	MB50X500		225S	—	37	364T	40	60
			225M	30	45	365T	50	75
	**MB70X400 -284/286T	30	180M	—	18.5	284T	15	25
	**MB70X400 -324/326T		180L	15	22	286T	20	30
			200M	18.5	30	324T	25	40
	200L		22	326T		30	50	
	**MB70X400 -364/365T		225S	—	37	364T	40	60
			225M	30	45	365T	50	75
	MB70X400 -404T		250S	37	55	404T	60	100
	MB70X550 -405T/444T		250M	45	75	405T	75	100 to 125
				55	90	444T	100	125 to 150
	MB70X650 -445T		280M	75	110	445T	125 to 150	150 to 200
	LMB100X750	31	315S 315M	75 to 110	110 to 160	447T	150 to 350	200 to 350
						449T		
						504		
						505		
						584		
						586		
						587		
	LMB100X1200		—	—	—	GE8307	400 TO 700	
						5810		
						586		
						587		
						5009		
						5808		

MOTORBASES

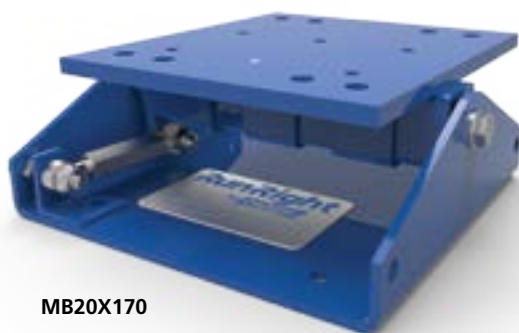
# Motorbases

## MB20, MB30

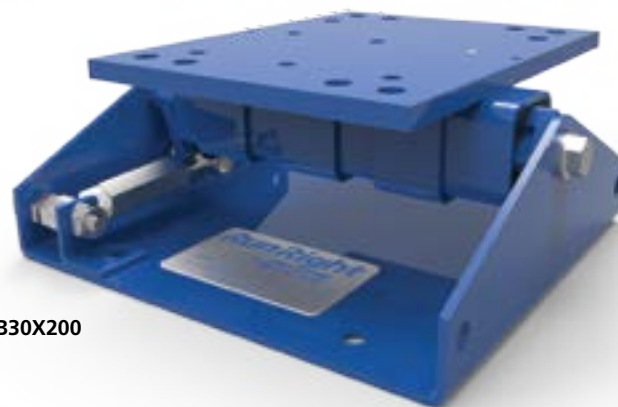
**RunRight™**  
by **Lovejoy**

### RunRight™ MB20, MB30 Motorbases

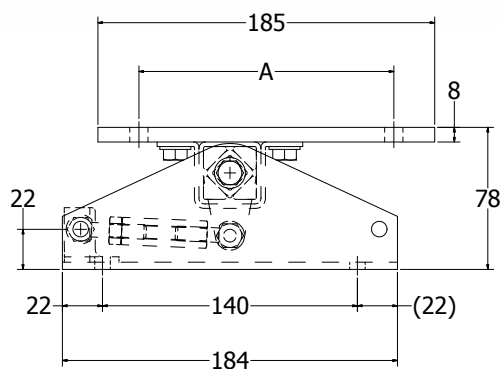
RunRight™ MB20 and MB30 Motorbases are designed for smaller belt drives using an electric motor with 1/2 to 5 HP. They are used on 90S to 112M IEC frame sizes and 143T to 184T NEMA frame sizes. They are manufactured with all steel components and Tensys™ 30 rubber inserts, and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



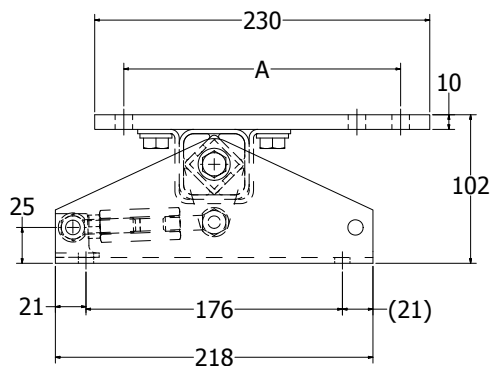
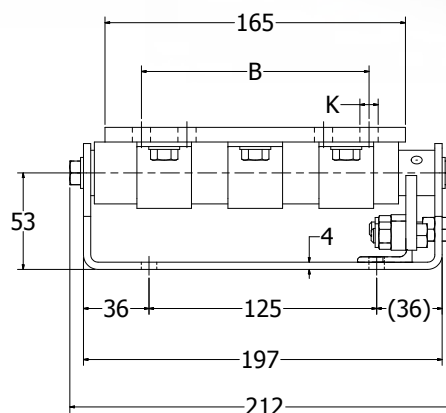
MB20X170



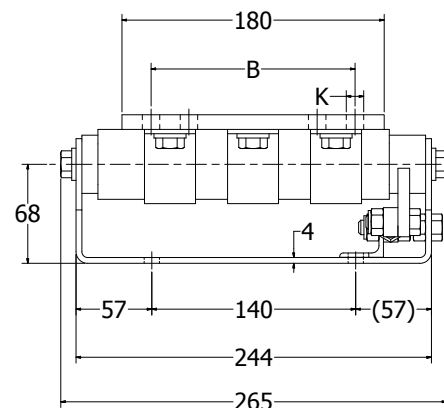
MB30X200



MB20X170



MB30X200



#### Motorbases Type MB20, MB30

UPC #	Type	IEC MOTOR FRAMES (millimeters)				NEMA MOTOR FRAMES (inches)			
		FRAME SIZE	A	B	K	FRAME SIZE	A	B	K
68514485285	MB20X170	90S	140	100	10.5	143T	5.50	4.00	0.34
		90L	140	125	10.5	145T	5.50	5.00	0.34
68514485286	MB30X200	100L	160	140	10.5	182T	7.50	4.50	0.41
		112M	190	140	10.5	184T	7.50	5.50	0.41

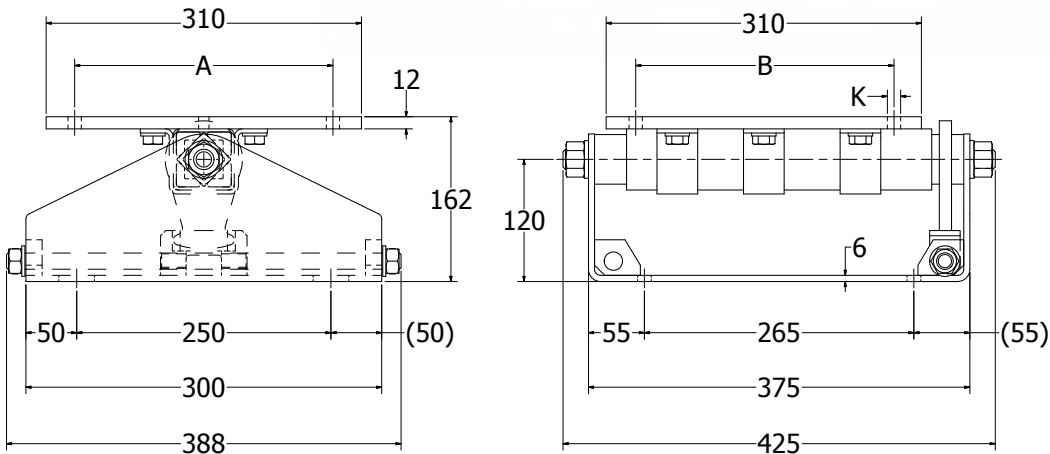
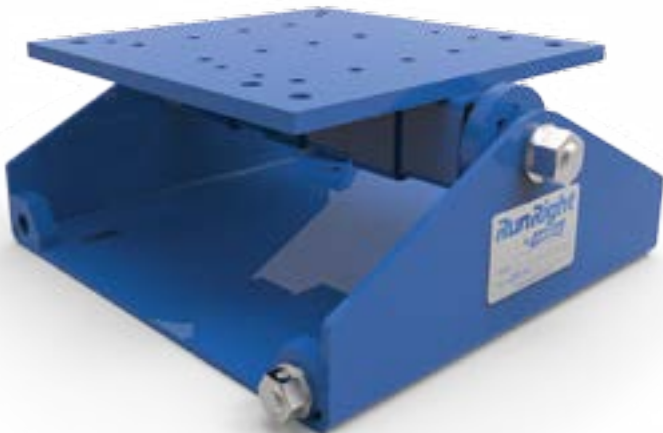
# Motorbases

## MB38



### RunRight™ MB38 Motorbases

RunRight™ MB38 Motorbases are designed for smaller belt drives using an electric motor with 3 to 20 HP. They are used on 132S to 160L IEC frame sizes and 213T to 256T NEMA frame sizes. They are manufactured with all steel components and Tensys™ 30 rubber inserts, and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Motorbases Type MB38									
UPC #	Type	IEC MOTOR FRAMES (millimeters)				NEMA MOTOR FRAMES (inches)			
		FRAME SIZE	A	B	K	FRAME SIZE	A	B	K
68514463904	MB38X300	132S	216	140	M10	213T	8.50	5.50	0.41
		132M	216	178	M10	215T	8.50	7.00	0.41
		160M	254	210	13.0	254T	10.00	8.25	0.53
		160L	254	254	13.0	256T	10.00	10.00	0.53



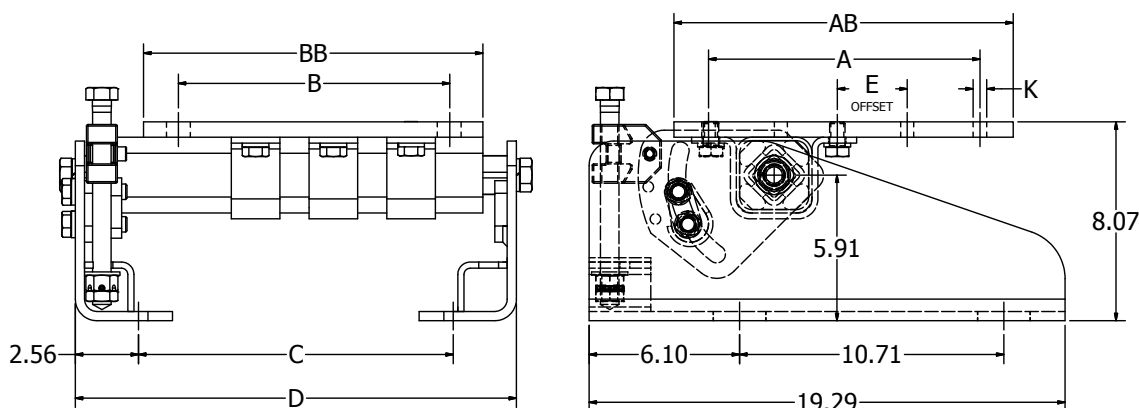
# Motorbases

## MB50

**RunRight™**  
by **Lovejoy**

### RunRight™ MB50 Motorbases

RunRight™ MB50 Motorbases are ideal for electric motors from 3 to 75 HP. They are used on 132S to 225M IEC frame sizes and 213T to 365T NEMA frame sizes. They are manufactured with all steel components and Tensys™ 30 rubber inserts, and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



**Motorbases Type MB50**

UPC #	Type	IEC MOTOR FRAMES (millimeters)				NEMA MOTOR FRAMES (inches)				Dimensions - Inches				
		FRAME SIZE	A	B	K	FRAME SIZE	A	B	K	AB	BB	C	D	E
68514463018	MB50X160	132S	216	140	3/8-16	213T	5.50	8.50	3/8-16	10.50	9.00	8.82	13.94	1.69
		132M	216	178	3/8-16	215T	7.00	8.50	3/8-16					
68514463019	MB50X200	160M	254	210	14.0	254T	10.00	8.25	0.55	12.13	12.13	12.76	17.88	1.77
		160L	254	254	14.0	256T	10.00	10.00	0.55					
68514463020	MB50X270	180M	279	241	14.0	284T	11.00	9.50	0.55	13.75	13.75	12.76	17.88	2.83
		180L	279	279	14.0	286T	11.00	11.00	0.55					
68514463021	MB50X400	200M	318	267	17.5	324T	12.50	10.50	0.69	15.88	14.68	16.69	21.81	2.83
		200L	318	305	17.5	326T	12.50	12.00	0.69					
68514463022	MB50X500	225S	356	286	17.5	364T	14.00	11.25	0.69	18.25	16.50	18.66	23.98	2.83
		225M	356	311	17.5	365T	14.00	12.25	0.69					

Notes: ■ All RunRight™ MB50 Motorbases are supplied with the motor plate installed in the recommended offset position. ■ In some applications, such as screen drives, the motor plate may be altered to the center position of the element unit to compensate for belt operating angle and required pre-tensioning.  
■ If necessary, the use of the 2nd hole positioning of the friction plate may be used to adjust the pre-tensioning travel.

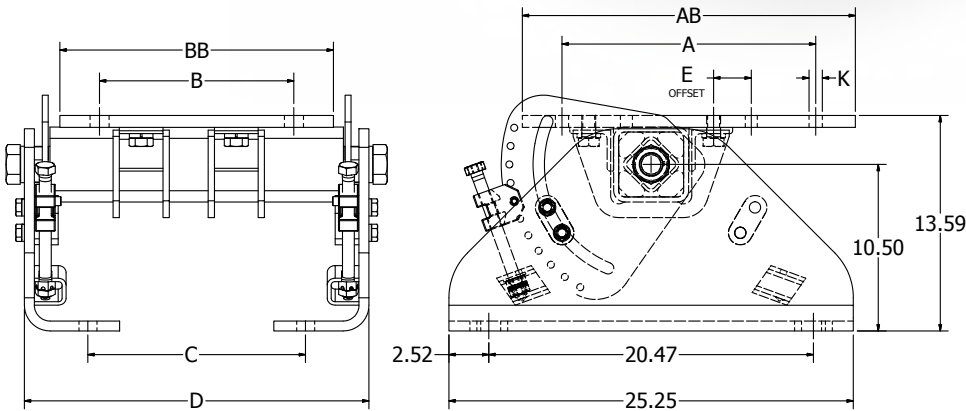
# Motorbases

## MB70



### RunRight™ MB70 Motorbases

RunRight™ MB70 Motorbases are ideal for electric motors from 15 to 200 HP. They are used on 180M to 280M IEC frame sizes and 284T to 445T NEMA frame sizes. They are manufactured with all steel components and Tensys™ 30 rubber inserts, and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Motorbases Type MB70														
UPC #	Type	IEC MOTOR FRAMES (millimeters)				NEMA MOTOR FRAMES (inches)				Dimensions - Inches				
		FRAME SIZE	A	B	K	FRAME SIZE	A	B	K	AB	BB	C	D	E
68514463960	*MB70X400-284/286T	180M	279	241	1/2-13	284T	11.00	9.50	1/2-13	21.00	17.25	13.78	21.72	—
		180L	279	279		286T		11.00						
68514463883	*MB70X400-324/326T	200M	318	267	17.5	324T	12.50	10.50	0.69	21.00	17.25	13.78	21.72	2.37
		200L	318	305		326T		12.00						
68514463858	*MB70X400-364/365T	225S	356	286	17.5	364T	14.00	11.25	0.69	21.00	17.25	13.78	21.72	2.37
		225M	356	311		365T		12.25						
68514463467	MB70X400-404T	250S	406	311	20.5	404T	16.00	12.25	0.81	21.00	17.25	13.78	21.72	2.37
68514463469	MB70X550-405T/444T	250M	406	349	20.5	405T	16.00	13.75	0.81	24.00	20.50	19.69	27.63	2.38
						444T		14.50						
68514463471	MB70X650-445T	280M	457	419	20.5	445T	18.00	16.50	0.81	24.00	22.50	23.62	31.56	2.38
Notes: ■ *RECOMMENDED FOR GRIZZLY FEEDER APPLICATIONS ONLY. ■ If the pretensioning of the motorbase is not effective, we recommend positioning the motor plate in the offset position to increase compensation travel. ■ All RunRight™ MB70 Motorbases are supplied with the motor plate installed in the recommended offset position. In some applications, such as screen drives, the motor plate may be altered to the center position of the element unit to compensate for belt operating angle and required pre-tensioning. If necessary, the use of the 2nd hole positioning of the friction plate may be used to adjust the pre-tensioning travel.														

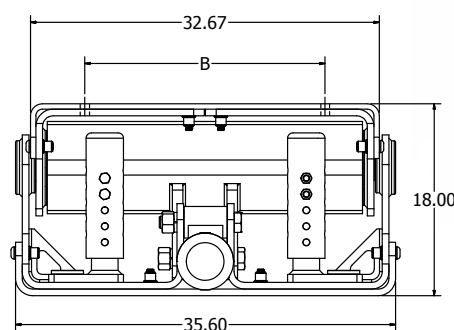
# Motorbases

## LMB100

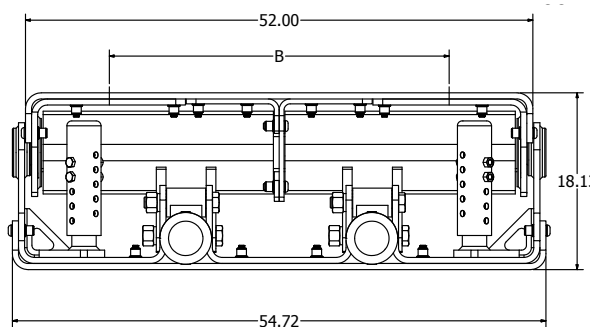
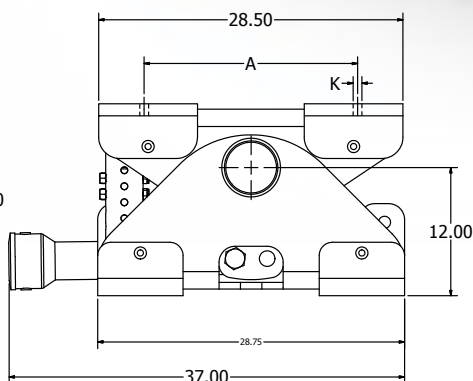
**RunRight™**  
by **Lovejoy**

### RunRight™ LMB100 Motorbases

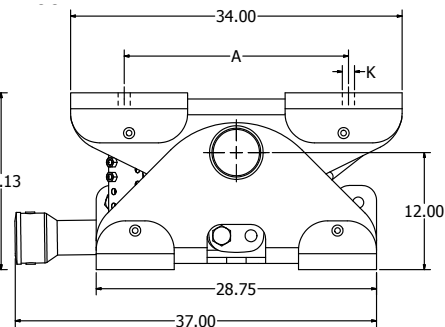
RunRight™ LMB100 Motorbases are ideal for electric motors from 150 to 700 HP. They are used on 315S and 315M IEC frame sizes and 447T to 5808 NEMA frame sizes. They are manufactured with all steel components and Tensys™ 30 rubber inserts, and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



**LMB100X750**



**LMB100X1200**



Motorbases Type LMB100									
UPC #	Type	IEC MOTOR FRAMES (millimeters)				NEMA MOTOR FRAMES (inches)			
		FRAME SIZE	A	B	K	FRAME SIZE	A	B	K
68514483510	LMB100X750	Consult Factory				447T	18.00	20.00	0.81
						449T	18.00	25.00	
		315S	508	406	20.5	504	20.00	16.00	0.81
		315M	508	457		505	20.00	18.00	
		Consult Factory				584	23.00	18.00	1.13
						586	23.00	20.00	
						587	23.00	25.00	
		68514483297	LMB100X1200-GE8307/5810	Consult Factory				GE8307	23.00
5810	27.00							32.00	
68514483515	LMB100X1200-586/587	Consult Factory				586	23.00	20.00	1.13
						587	23.00	25.00	
68514483516	LMB100X1200-5009	Consult Factory				5009	20.00	28.00	1.25
68514484035	LMB100X1200-5808	Consult Factory				5808	23.00	28.00	1.25
Notes: ■ The LMB100 Motorbases listed are Made To Order / Engineered To Order only. Please consult factory for lead time availability or for motor frame sizes not listed. ■ The use of the front positioning hole of the pre-tensioning voke may be used to increase the pre-tensioning travel.									

Notes: ■ The LMB100 Motorbases listed are Made To Order / Engineered To Order only. Please consult factory for lead time availability or for motor frame sizes not listed.

■ The use of the front positioning hole of the pre-tensioning yoke may be used to increase the pre-tensioning travel.

# RunRight<sup>TM</sup>

by **Lovejoy**



OSCILLATING MOUNTS

Lovejoy, Inc has made every effort to assure the accuracy of the information contained in this catalog. However, Lovejoy, Inc. expressly disclaims any and all liability for the contents of this catalog including, but not limited to, errors, inaccuracies, misstatements, omissions and any incidental or consequential damages which may occur as the result of relying on this information. Lovejoy reserves the right to change specifications and information without notice.



# Oscillating Mounts



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## Safety Warning



When using Lovejoy products, you must follow these instructions and take the following precautions. Failure to do so may cause the power transmission product to break and parts to be thrown with sufficient force to cause severe injury or death.

Refer to this Lovejoy Catalog for proper selection, sizing, horsepower, torque range, and speed range of power transmission products, including elastomeric elements for couplings. Follow the installation instructions included with the product, and in the individual product catalogs for proper installation of power transmission products. Do not exceed catalog ratings.






Do not use any of these power transmission products for elevators, man lifts, or other devices that carry people. If the




power transmission product fails, the lift device could fall resulting in severe injury or death.

For all power transmission products, you must install suitable guards in accordance with OSHA and American Society of Mechanical Engineers Standards. Do not start power transmission product before suitable guards are in place. Failure to properly guard these products may result in severe injury or death from personnel contacting moving parts or from parts being thrown from assembly in the event the power transmission product fails.

If you have any questions, contact the Lovejoy Engineering Department at 1-630-852-0500.

# Oscillating Mounts Selection Guide

Free Oscillating System Selection Table					
Model		Page	Single Mass System Circular Motion Screen	Single Mass System Linear Motion Screen	Counterframe Dual Mass System
	AB	37, 38	Oscillating Mount specifically designed to support or suspend vibratory equipment or drive systems. Equipment frequency of 2 to 3 Hz. 9 sizes from 11 to 4,500 lbs per AB.		
	AB-HD	39	Heavy duty Oscillating Mount specifically designed for impact loads and inconsistent production loading. Equipment frequency of 2.5 to 3.5 Hz. 6 sizes from 112 to 3,145 lbs per AB-HD.		
	AB-D	40	Compact design Oscillating Mount with a much higher load capacity ideal for two mass systems. Equipment frequency of 3 to 4.5 Hz. 7 sizes from 110 to 3,600 lbs per AB-D.		
	AB-I	41	Stainless steel Oscillating Mount specific for food, pharmaceutical and wash down requirements. Equipment frequency of 2 to 3 Hz. 6 sizes from 16 to 1,528 lbs per AB-I.		
	HS	42	Oscillation mounts designed to suspend vibratory equipment or drive systems. Equipment frequency of 3 to 4 Hz. 5 sizes from 112 to 3,147 lbs per HS.		


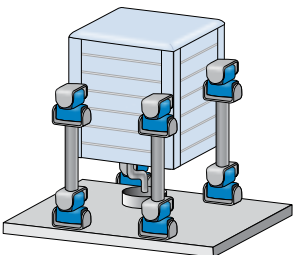

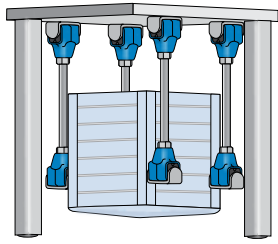
Crank Driven System Selection Table			
Model		Page	
	AU	43	Single Rocker for either supporting or suspending vibratory conveyors, screens, feeder equipment. Either right or left-hand threads on mounts. 7 sizes from 22 to 1,124 lbs per rocker.
	ST	44	Drive Head designed to transmit power from an eccentric through the connecting rod and flexible head. Either right or left-hand threads on drive heads. 5 sizes from 90 to 1,350 lbs per drive head.
	DO-A	45	Highly dynamic Spring Accumulator designed for feeder systems that operate near resonance frequency. 5 sizes from 571 to 1,827 in-lbs.

Rubber Compounds	Torque & Load Factor*	Operating Temperature F° (C°)	Rubber Type	Rubber Characteristics
Tensys™ 10	1.0	-40° to 180° (-40° to 80°)	Natural	Standard
Tensys™ 20	approximately 1.0	-22° to 195° (-30° to 90°)	Neoprene	Oil Resistant
Tensys™ 30	approximately 1.0	-40° to 180° (-40° to 80°)	Natural	High-Dampening (motorbases only)
Tensys™ 40	approximately 0.6	180° to 250° (80° to 120°)	EPDM	High Temperature Resistant
Tensys™ 50	approximately 3.0	-31° to 195° (-35° to 90°)	Urethane	High Torque

Note: ■ \*Factor in relation to torque & loads shown on standard selection charts.

# Gyratory Sifter Selection Guide

**Gyratory Sifters Selection Table**

Model		Page	Application Notes	
	AV	46	Rocker with larger than standard elastomeric elements designed for free-hanging gyratory sifting machines. Either right or left-hand threads. 5 sizes up to 3,600 lbs per AV.	 <b>Gyratory sifter upright staying</b>
	AK	47	Rocker designed for supporting or suspending gyratory sifting machines. 10 sizes up to 9,000 lbs per AK.	
				 <b>Gyratory sifter hanging</b>

## Application Example: Shaker

**Mass of empty shaker frame and drive:**  $m_s$  (1,500 lbs)

**Mass of product:**  $m_p$  (440 lbs)

**Total vibrating mass:**  $m$  (1,940 lbs)

**Mass distribution feed end:** 33%

**Mass distribution discharge end:** 67%

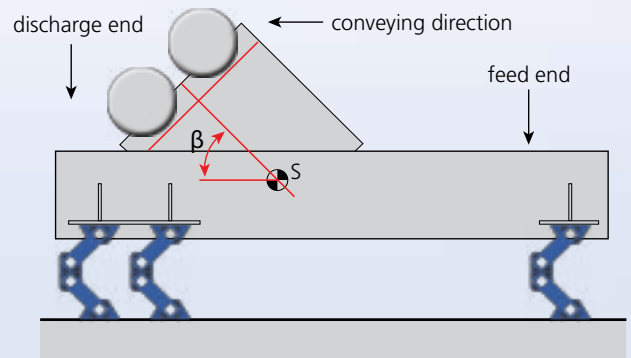
**Feed end load per corner:**  $F_f$  (320 lbs)

**Discharge end load per corner:**  $F_d$  (649 lbs)

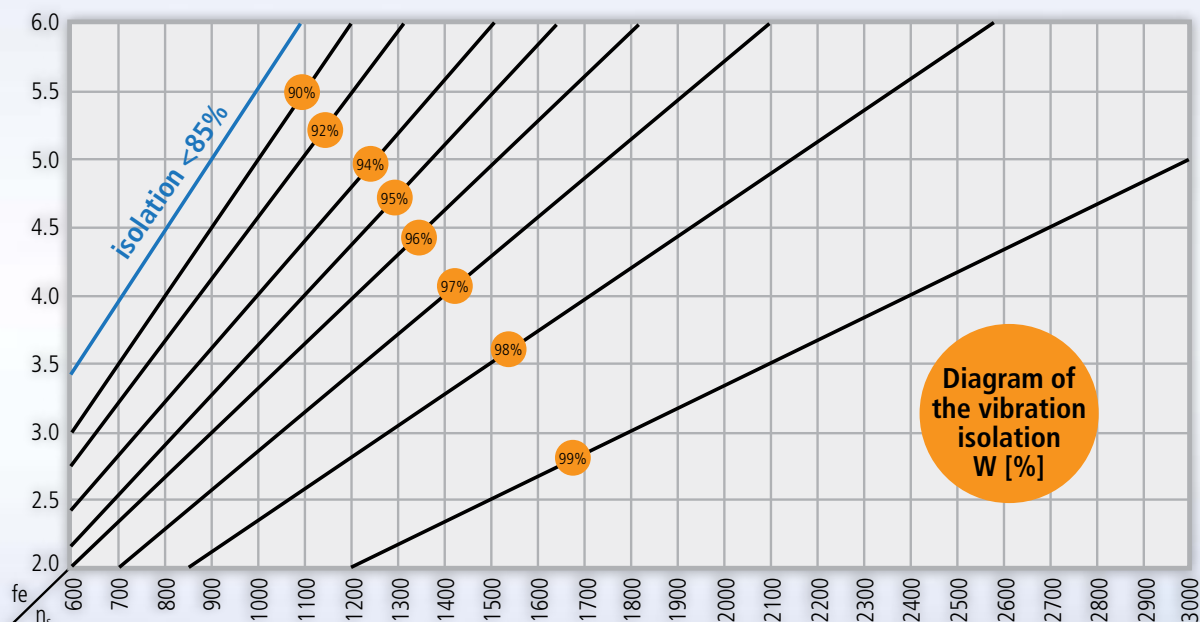
**Motor revolutions:**  $n_s$  (960 RPM)

**Feed End Load Formula:**  $F_f = \left( \frac{m \cdot \% \text{ feed end}}{2} \right)$

**Discharge End Load Formula:**  $F_d = \left( \frac{m \cdot \% \text{ discharge end}}{2} \right)$

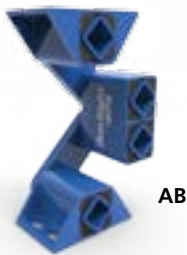
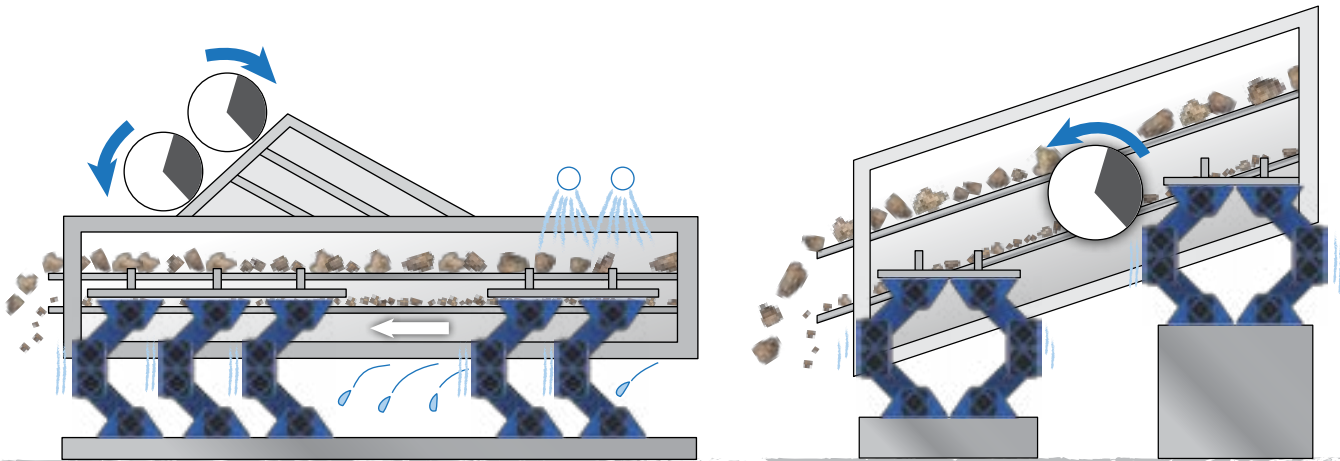


This application would require six AB38 Oscillating Mounts. Two on each side of the discharge end and one on each side of the feed end. Using the chart below, select the proper motor revolutions and the natural frequency of the AB unit selected. This shows the AB38 will give 97% isolation at 2.7Hz with 960 RPM motor revolution.



# Oscillating Mounts

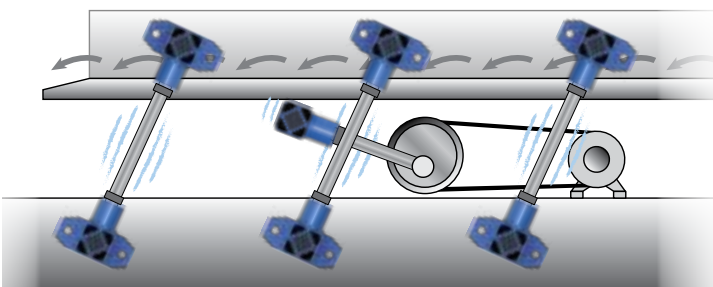
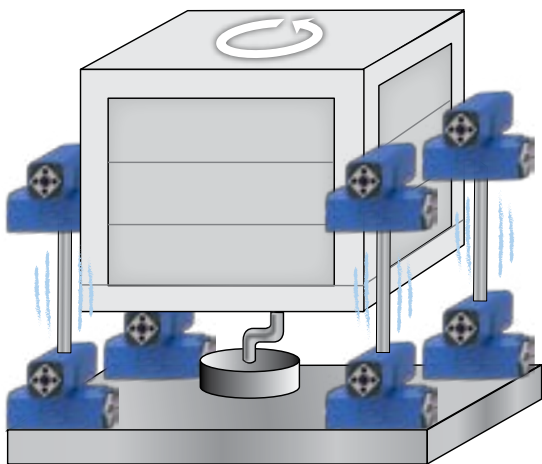
## Usage Illustrations



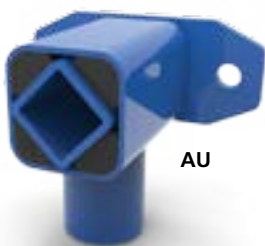
Overload-proof vibration-absorbing mounts provide a high degree of isolation on both linear and circular motion screens.

OSCILLATING MOUNTS

Long-lasting, quiet-operating rockers, are designed to support or suspend oscillatory equipment and machinery.



Maintenance-free rocker arms designed for use on eccentric oscillator drive systems for either supporting or suspending vibratory conveyors, screens, and feeder equipment. Flexible drive head transmits power from an eccentric through the connecting rod.



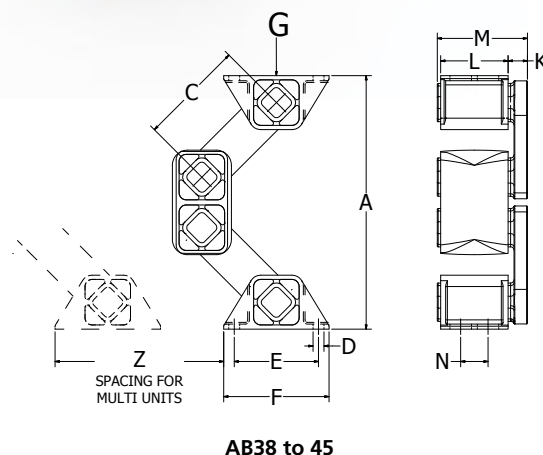
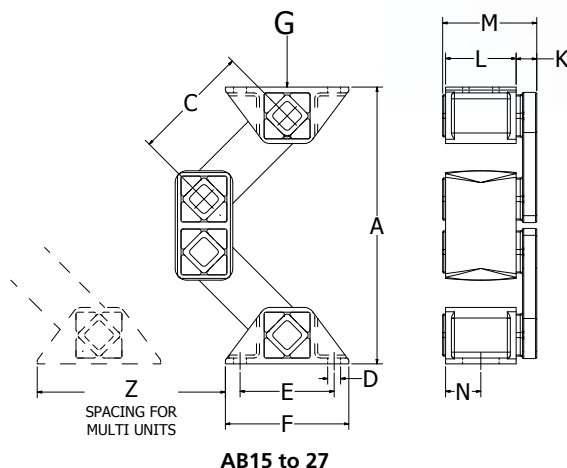
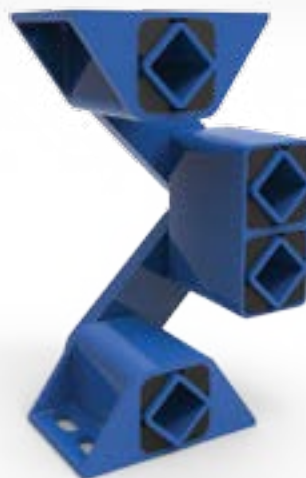
# Oscillating Mounts

## AB15 to 45

**RunRight™**  
by **Lovejoy**

### RunRight™ Oscillation Mounts AB15 to 45

The RunRight™ Oscillation Mounts AB15 to 45 are specifically designed to support or suspend vibratory equipment or drive systems. These mounts remove harmful resident frequencies that cause spring damage due to an inefficient system that utilizes coil spring suspensions and eliminates resulting safety concerns. All housings are cast iron and the inner squares and arms are steel. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



#### Oscillating Mounting Type AB15 to 45

UPC #	Type	G Load Range lbs (N)	Dimensions - Inches (mm)											
			A	A	A	C	D	E	F	K	L	M	N	Z
			UNLOADED	MAX LOAD	REPLACE HEIGHT									
68514478498	AB15	11 to 36 (50 to 160)	6.57 (167)	4.57 (116)	4.05 (103)	3.15 (80)	.28 (7)	1.97 (50)	2.56 (66)	.47 (12)	1.57 (40)	2.08 (53)	.79 (20)	3.54 (90)
68514478499	AB18	27 to 67 (120 to 300)	8.11 (206)	5.63 (143)	4.96 (126)	3.94 (100)	.35 (9)	2.36 (60)	3.15 (80)	.55 (14)	1.97 (50)	2.36 (67)	.98 (25)	4.33 (110)
68514478496	AB27	56 to 180 (250 to 800)	9.25 (235)	6.77 (172)	6.10 (155)	3.94 (100)	.43 (11)	3.15 (80)	4.13 (105)	.71 (18)	2.36 (60)	3.15 (80)	1.18 (30)	5.51 (140)
68514478501	AB38	135 to 360 (600 to 1,600)	11.85 (301)	8.74 (222)	7.91 (201)	4.92 (125)	.51 (13)	3.94 (100)	4.92 (125)	.91 (23)	3.15 (80)	4.21 (107)	1.97 (32)	7.08 (180)
68514481086	AB45	270 to 670 (1,200 to 3,000)	13.62 (346)	14.06 (357)	9.25 (235)	5.51 (140)	.51 (13)	4.53 (115)	5.83 (148)	1.10 (28)	3.94 (100)	5.2 (132)	2.76 (40)	8.46 (215)

Note: ■ After one year, the specified cold flow will occur at the maximum allowable compressible load range.

UPC #	Type	Natural Frequency G Min - G Max (Hz)	Dynamic Spring Value		Capacity limits @ different RPM						Materials / Finish		
					720 RPM		960 RPM		1440 RPM		Inner Square & Arms	Outer Housing	Finish
			cd	cd	sw Max (mm)	K Max (mm)	sw Max (mm)	K Max (mm)	sw Max (mm)	K Max (mm)			
			Vertical ( N/mm )	Horizontal ( N/mm )									
68514478498	AB15	4.3 - 2.8	10	6	14	4.1	12	6.2	8	9.3	Steel welded construction	Cast Iron	Painted RunRight Safety Blue
68514478499	AB18	3.6 - 2.6	18	14	17	4.9	15	7.7	8	9.3			
68514478496	AB27	3.7 - 2.7	40	25	17	4.9	14	7.2	8	9.3			
68514478501	AB38	3.0 - 2.4	60	30	20	5.8	17	8.8	8	9.3			
68514481086	AB45	2.8 - 2.3	100	50	21	6.1	18	9.3	8	9.3			

Notes: ■ Dynamic spring values at 960 RPM and deflection of 8mm at nominal loads.  
See pages 34 and 35 for additional product and performance data.

■ It is not recommended to exceed accelerations greater than 9.3g.



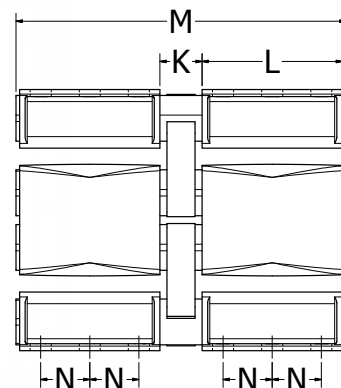
# Oscillating Mounts

## AB50

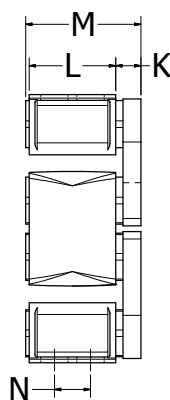
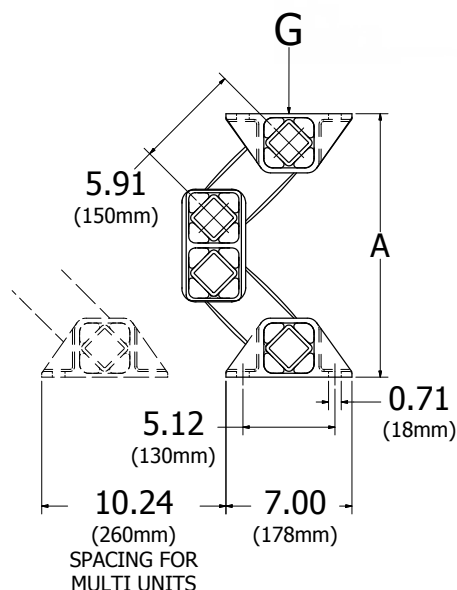
**RunRight™**  
by **Lovejoy**

### RunRight™ Oscillation Mounts AB50

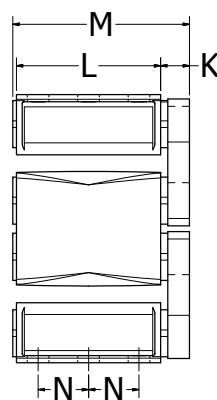
The RunRight™ Oscillation Mounts AB50 are specifically designed to support or suspend vibratory equipment or drive systems. These mounts remove harmful resident frequencies that cause spring damage due to an inefficient system that utilizes coil spring suspensions and eliminates resulting safety concerns. All housings are cast iron and the inner squares and arms are steel. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



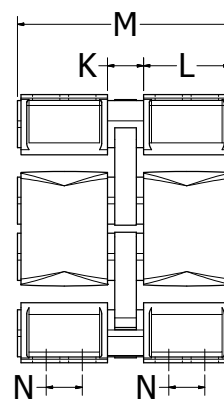
AB50-2 TWIN



AB50



AB50-2



AB50 TWIN

### Oscillating Mounting Type AB50

UPC #	Type	G Load Range lbs (N)	Dimensions - Inches (mm)						
			A	A	A	K	M	N	L
			UNLOADED	MAX LOAD	REPLACE HEIGHT				
68514425211	AB50	560 to 1,350 (2,500 to 6,000)	14.64 (372)	10.90 (277)	19.96 (253)	1.38 (35)	6.30 (160)	1.97 (50)	4.72 (120)
68514463428	AB50-2	940 to 2,250 (4,180 to 10,000)	14.49 (368)	10.75 (273)	19.80 (249)	1.57 (40)	9.65 (245)	2.76 (70)	7.87 (200)
68514463797	AB50 TWIN	1,120 to 2,700 (4,980 to 12,000)	14.64 (372)	10.90 (277)	19.96 (253)	1.97 (50)	11.81 (300)	1.97 (50)	4.72 (120)
68514463798	AB50-2 TWIN	1,890 to 4,500 (8,400 to 20,000)	14.49 (368)	10.75 (273)	19.80 (249)	2.36 (60)	18.5 (470)	2.76 (70)	7.87 (200)

Notes: ■ These OSC Mounts may be "Mixed & Matched" as required to achieve proper loading.  
■ After one year, the specified cold flow will occur at the maximum allowable compressible load range.

UPC #	Type	Natural Frequency G Min - G Max (Hz)	Dynamic Spring Value		Capacity limits @ different RPM						Materials / Finish		
					720 RPM		960 RPM		1440 RPM		Inner Square & Arms	Outer Housing	Finish
			cd	cd	sw Max (mm)	K Max (mm)	sw Max (mm)	K Max (mm)	sw Max (mm)	K Max (mm)			
			Vertical ( N/mm )	Horizontal ( N/mm )									
68514425211	AB50	2.4 - 2.1	195	85	22	6.4	18	9.3	8	9.3	Steel welded construction	Cast Iron	Painted RunRight Safety Blue
68514463428	AB50-2		320	140									
68514463797	AB50 TWIN		380	170									
68514463798	AB50-2 TWIN		640	280									

Notes: ■ Dynamic spring values at 960 RPM and deflection of 8mm at nominal loads. ■ It is not recommended to exceed accelerations greater than 9.3g.  
■ See pages 34 and 35 for additional product and performance data.

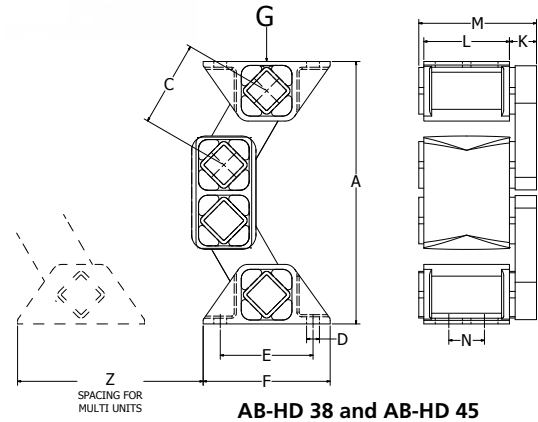
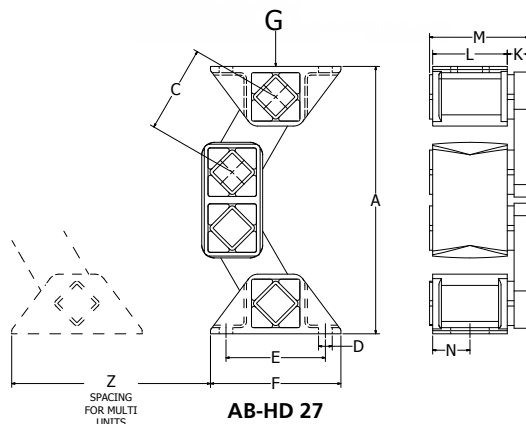
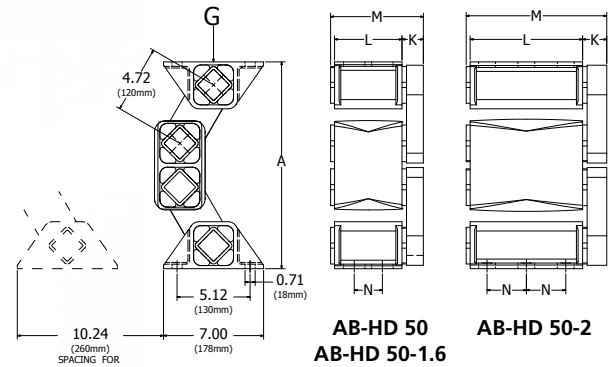
# Oscillating Mounts

## AB-HD

**RunRight™**  
by **Lovejoy**

### RunRight™ Oscillation Mounts AB-HD

The RunRight™ Oscillation Mounts AB-HD are a heavy-duty mount specifically designed for impact loads and inconsistent production loading. All housings are cast iron and the inner squares and arms are steel. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



### Oscillating Mounting Type AB-HD

UPC #	Type	G Load Range lbs (N)	Dimensions - Inches (mm)										
			A	A	C	D	E	F	K	L	M	N	Z
			UNLOADED	MAX LOAD									
68514483844	AB-HD 27	112 to 280 (500 to 1,250)	8.46 (215)	7.17 (182)	2.76 (70)	0.43 (11)	3.15 (80)	4.13 (105)	0.67 (17)	2.36 (60)	3.15 (80)	0.79 (20)	5.51 (140)
68514483845	AB-HD 38	270 to 570 (1,200 to 2,500)	11.54 (293)	9.68 (246)	3.74 (95)	0.51 (Ø13)	3.94 (100)	4.72 (125)	0.83 (21)	3.15 (80)	4.09 (104)	1.58 (40)	7.08 (180)
68514483846	AB-HD 45	450 to 945 (2,000 to 4,200)	13.62 (346)	11.42 (290)	4.33 (110)	0.51x0.79 (13x20)	4.53 (115)	5.71 (145)	1.10 (28)	3.94 (100)	5.20 (132)	2.56 (65)	8.46 (215)
68514480319	AB-HD 50	785 to 1,880 (3,500 to 8,400)	14.48 (368)	12.00 (305)	—	—	—	—	1.50 (38)	4.72 (120)	6.50 (165)	1.97 (50)	—
68514482742	AB-HD 50-1.6	1,075 to 2,540 (4,800 to 11,300)	14.48 (368)	10.9 (277)	—	—	—	—	1.50 (38)	6.30 (160)	8.07 (205)	2.76 (70)	—
68514479095	AB-HD 50-2	1,345 to 3,145 (6,000 to 14,000)	14.48 (368)	10.9 (277)	—	—	—	—	1.69 (43)	7.87 (200)	9.84 (250)	2.76 (70)	—

Notes: ■ The OSC Mounts shown shaded in gray may be "Mixed & Matched" as required to achieve proper loading.

■ After one year, the specified cold flow will occur at the maximum allowable compressible load range.

UPC #	Type	Natural Frequency G Min - G Max (Hz)	Dynamic spring value		Capacity limits @ different RPM						Materials / Finish		
					720 RPM		960 RPM		1440 RPM		Inner Square & Arms	Outer Housing	Finish
			cd	cd	sw Max (mm)	K Max (mm)	sw Max (mm)	K Max (mm)	sw Max (mm)	K Max (mm)			
			Vertical ( N/mm )	Horizontal ( N/mm )									
68514483844	AB-HD 27	4.8 - 3.1	70	33	12	3.5	10	5.2	8	9.3	Steel Welded	Cast Iron	Painted Blue
68514483845	AB-HD 38	3.6 - 2.7	100	48	15	4.3	13	6.7	8	9.3			
68514483846	AB-HD 45	3.3 - 2.5	150	72	17	4.9	14	7.2	8	9.3			
68514480319	AB-HD 50	3.2 - 2.4	270	130	18	5.2	15	7.7	8	9.3			
68514482742	AB-HD 50-1.6	3.2 - 2.4	360	172	18	5.2	15	7.7	8	9.3			
68514479095	AB-HD 50-2	3.2 - 2.4	450	215	18	5.2	15	7.7	8	9.3			

Note: ■ See pages 34 and 35 for additional product and performance data.

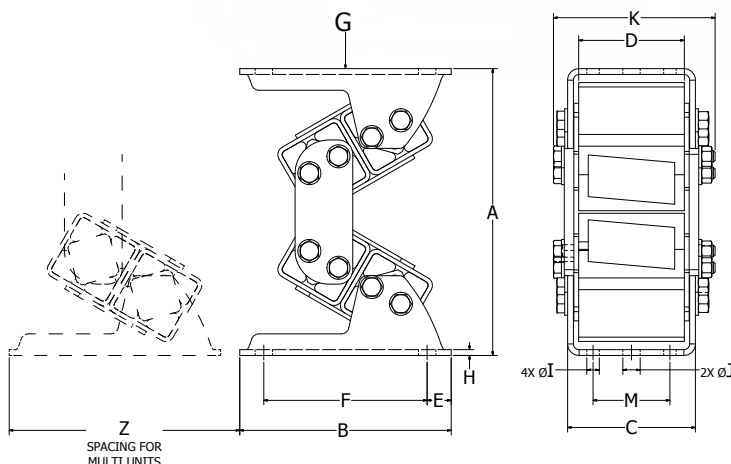
# Oscillating Mounts

## AB-D

**RunRight™**  
by **Lovejoy**

### RunRight™ Oscillation Mounts AB-D

The RunRight™ Oscillation Mounts AB-D are a compact design with a much higher load capacity than the standard AB Mounts, ideal for two mass systems. All housings are cast iron and the inner squares and arms are steel. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Oscillating Mounting Type AB-D

UPC #	Type	G Load Range lbs (N)	Dimensions - Inches (mm)												
			A		B	C	D	E	F	H	I	J	K	M	Z
			UNLOADED	MAX LOAD											
68514475676	AB-D 18	110 to 270 (500 to 1,200)	5.39 (137)	4.61 (112)	4.53 (115)	2.40 (61)	1.97 (50)	0.49 (12.5)	3.54 (90)	0.12 (3)	0.35 (9)	0.35 (9)	2.91 (74)	1.18 (30)	4.72 (120)
68514463733	AB-D 27	225 to 560 (1,000 to 2,500)	7.24 (184)	6.18 (148)	5.91 (150)	3.66 (93)	3.15 (80)	0.59 (15)	4.72 (120)	0.16 (4)	0.35 (9)	0.43 (11)	4.57 (116)	1.97 (50)	6.10 (155)
68514463734	AB-D 38	450 to 900 (2,000 to 4,000)	9.61 (244)	8.23 (199)	7.28 (185)	4.65 (118)	3.94 (100)	0.69 (17.5)	5.91 (150)	0.20 (5)	0.43 (11)	0.53 (13.5)	5.79 (147)	2.76 (70)	7.48 (190)
68514475677	AB-D 45	675 to 1,350 (3,000 to 6,000)	11.73 (298)	9.92 (240)	8.66 (220)	5.20 (132)	4.33 (110)	0.98 (25)	6.69 (170)	0.24 (6)	0.53 (13.5)	0.71 (18)	6.61 (168)	3.15 (80)	8.86 (225)
68514463854	AB-D 50	900 to 2,025 (4,000 to 9,000)	12.95 (329)	10.94 (272)	9.25 (235)	5.59 (142)	4.72 (120)	0.98 (25)	7.28 (185)	0.31 (8)	0.53 (13.5)	0.71 (18)	6.54 (166)	3.54 (90)	9.45 (240)
68514463855	AB-D 50-1.6	1,350 to 2,700 (6,000 to 12,000)	12.95 (329)	10.94 (272)	9.25 (235)	7.32 (186)	6.30 (160)	0.98 (25)	7.28 (185)	0.31 (8)	0.53 (13.5)	0.71 (18)	8.43 (214)	3.54 (90)	9.45 (240)
68514463856	AB-D 50-2	1,800 to 3,600 (8,000 to 16,000)	12.95 (329)	10.94 (272)	9.25 (235)	8.90 (226)	7.87 (200)	0.98 (25)	7.28 (185)	0.31 (8)	0.53 (13.5)	0.71 (18)	10.24 (260)	3.54 (90)	9.45 (240)

Notes: ■ The OSC Mounts shown shaded in gray may be "Mixed & Matched" as required to achieve proper loading.

■ After one year, the specified cold flow will occur at the maximum allowable compressible load range.

UPC #	Type	Natural Frequency G Min - G Max (Hz)	Dynamic spring value			Capacity limits @ different RPM						Materials / Finish (Zinc Plated Hardware)
						720 RPM		960 RPM		1440 RPM		
			cd	cd at sw [mm]	cd	sw Max (mm)	K Max (mm)	sw Max (mm)	K Max (mm)	sw Max (mm)	K Max (mm)	
			vertical		horizontal							
( N/mm )	( N/mm )											
68514475676	AB-D18	6.1 - 4.4	100	4	20	5	1.4	5	2.6	4	4.6	Aluminum Inner Profiles Painted Blue Cast Iron Housings Zinc Plated Steel Brackets
68514463733	AB-D27	5.4 - 3.9	160	4	35	7	2.0	6	3.1	5	5.8	
68514463734	AB-D38	4.3 - 3.4	185	6	40	9	2.6	8	4.1	6	7.0	
68514475677	AB-D45	3.7 - 3.1	230	8	70	11	3.2	9	4.6	7	8.1	
68514463854	AB-D50	3.7 - 2.9	310	8	120	12	3.5	10	5.2	8	9.3	
68514463855	AB-D50-1.6	3.7 - 2.9	430	8	160	12	3.5	10	5.2	8	9.3	
68514463856	AB-D50-2	3.5 - 2.8	540	8	198	12	3.5	10	5.2	8	9.3	

Notes: ■ Dynamic spring values at 960 RPM and deflection of 8mm at nominal loads.

■ It is not recommended to exceed accelerations greater than 9.3g.

■ See pages 34 and 35 for additional product and performance data.

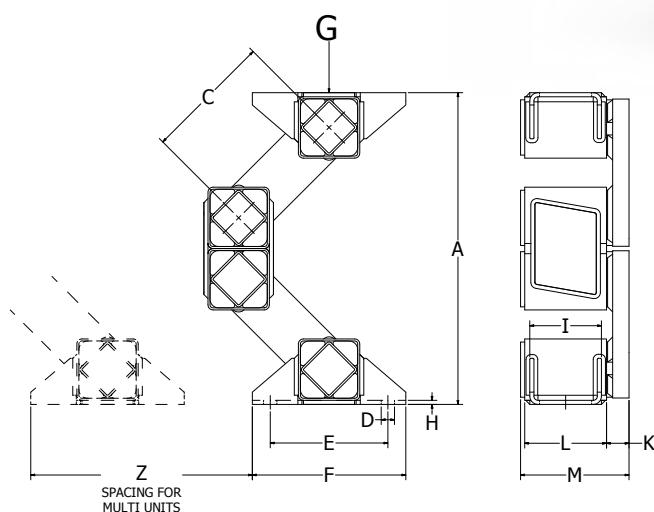
# Oscillating Mounts

## AB-I

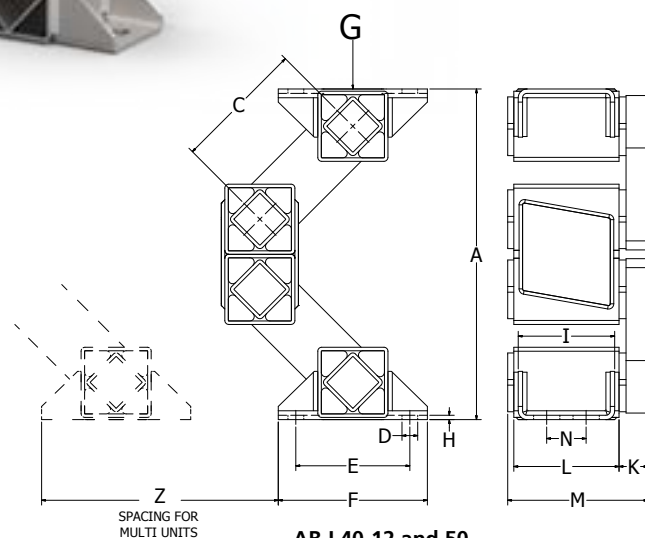
**RunRight™**  
by **Lovejoy**

### RunRight™ Oscillation Mounts AB-I

The RunRight™ Oscillation Mounts AB-I are a stainless steel design specific for the food, pharmaceutical and wash down requirements. All housings, arms and inner squares are manufactured out of stainless steel. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



AB-I 15 to AB-I 40



AB-I 40-12 and 50

### Oscillating Mounting Type AB-I

UPC #	Type	G Load Range lbs (N)	Dimensions - Inches (mm)												
			A		C	D	E	F	H	I	K	L	M	N	Z
			UNLOADED	MAX LOAD											
68514457918	AB-I 15	16 to 40 (70 to 180)	6.58 (167)	4.50 (114)	3.15 (80)	.28 x .53 (7 x 13.5)	1.97 (50)	2.56 (65)	.10 (2.5)	1.34 (34)	.53 (13.5)	1.57 (40)	2.09 (53)	—	4.53 (115)
68514457919	AB-I 20	36 to 103 (160 to 460)	8.39 (213)	5.75 (146)	3.94 (100)	.35 x .59 (9 x 15)	2.56 (65)	3.35 (85)	.08 (2)	1.73 (44)	.55 (14)	1.97 (50)	2.64 (67)	—	5.71 (145)
68514457920	AB-I 30	90 to 225 (400 to 1,000)	9.82 (249)	7.24 (184)	3.94 (100)	.43 x .79 (11 x 20)	3.35 (85)	4.33 (110)	.16 (4)	1.97 (50)	.63 (16)	2.36 (60)	3.15 (80)	—	6.50 (165)
68514457921	AB-I 40	157 to 360 (700 to 1,600)	12.00 (305)	8.86 (225)	4.92 (125)	.51 x .98 (13 x 25)	4.53 (115)	5.90 (150)	.16 (4)	2.76 (70)	.87 (22)	3.15 (80)	4.17 (106)	—	8.46 (215)
68514485674	AB-I 40-12	292 to 720 (1,300 to 3,200)	10.61 (270)	8.00 (203)	3.94 (100)	.51 x .79 (13 x 20)	4.53 (115)	5.90 (150)	.16 (4)	4.33 (110)	.87 (22)	4.72 (120)	5.75 (146)	2.36 (60)	8.46 (215)
68514457922	AB-I 50	560 to 1,528 (2,500 to 6,800)	14.85 (377)	14.99 (279)	5.91 (150)	.71 x 1.18 (18 x 30)	5.12 (130)	6.69 (170)	.20 (5)	4.33 (110)	1.30 (33)	4.72 (120)	6.30 (160)	1.77 (45)	11.02 (280)

Note: ■ After one year, the specified cold flow will occur at the maximum allowable compressible load range.

UPC #	Type	Natural Frequency G Min - G Max (Hz)	Dynamic spring value		Capacity limits @ different RPM						Materials / Finish		
					720 RPM		960 RPM		1440 RPM		Inner Square & Arms	Outer Housing	Finish
			cd	cd	sw Max (mm)	K Max (mm)	sw Max (mm)	K Max (mm)	sw Max (mm)	K Max (mm)			
			Vertical ( N/mm )	Horizontal ( N/mm )									
68514457918	AB-I 15	4 - 2.8	10	6	14	4.1	12	6.2	8	9.3	Stainless Steel welded construction	Stainless Steel welded construction	Unpainted
68514457919	AB-I 20	3.6 - 2.4	22	14	177	4.9	15	7.7	8	9.3			
68514457920	AB-I 30	3.5 - 2.6	48	27	177	4.9	14	7.2	8	9.3			
68514457921	AB-I 40	3 - 2.4	60	30	20	5.8	17	8.8	8	9.3			
68514485674	AB-I 40-12	3.4 - 2.6	115	55	16	4.6	13	6.7	8	9.3			
68514457922	AB-I 50	2.8 - 2.2	220	100	22	6.4	18	9.3	8	9.3			

Notes: ■ Dynamic spring values at 960 RPM and deflection of 8mm at nominal loads.

■ It is not recommended to exceed accelerations greater than 9.3g.

■ See pages 34 and 35 for additional product and performance data.

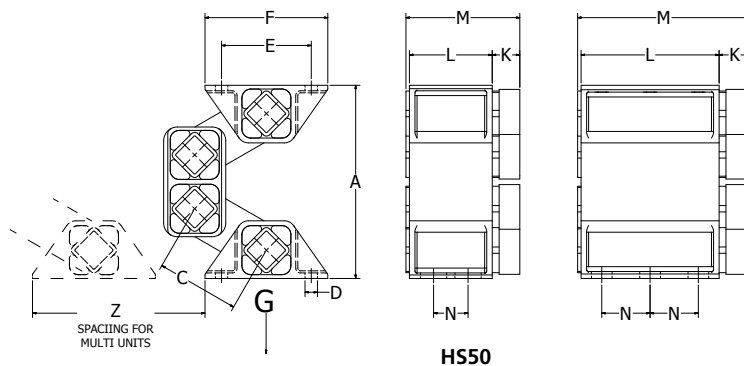
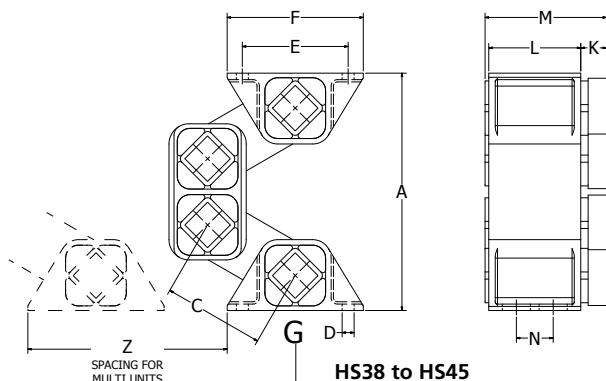
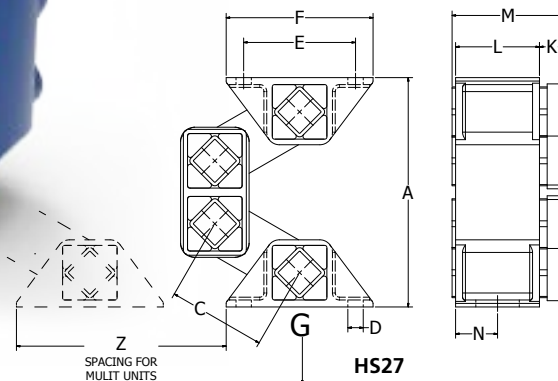
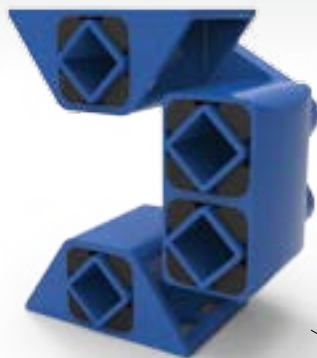
# Oscillating Mounts

## HS

**RunRight™**  
by **Lovejoy**

### RunRight™ Oscillation Mounts HS

The RunRight™ Oscillation Mounts HS are specifically designed to suspend vibratory equipment or drive systems. These mounts remove harmful resident frequencies that cause spring damage due to an inefficient system that utilizes coil spring suspensions, and eliminates resulting safety concerns. All housings are cast iron the inner squares and arms are steel. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40°F to +180°F (-40°C to +80°C) temperature range.



### Oscillating Mounting Type HS

UPC #	Type	G Load Range lbs (N)	Dimensions - Inches (mm)										
			A		C	D	E	F	K	L	M	N	Z
			UNLOADED	MAX LOAD									
68514481702	HS27	112 to 281 (500 to 1,250)	6.46 (164)	7.95 (202)	2.76 (70)	.43 x 1.22 (11 x 31)	3.15 (80)	4.13 (105)	0.69 (17.5)	2.36 (60)	3.15 (80)	1.18 (30)	5.51 (140)
68514481703	HS38	270 to 562 (1,200 to 2,500)	8.78 (223)	10.83 (275)	3.74 (95)	.51 x 1.38 (13 x 25)	3.94 (100)	4.92 (130)	0.91 (23)	3.15 (80)	4.21 (107)	1.58 (40)	7.08 (180)
68514481704	HS45	450 to 944 (2,000 to 4,200)	10.43 (265)	12.80 (325)	4.33 (110)	.51 x 1.22 (13 x 31)	4.53 (115)	5.83 (148)	1.10 (28)	3.94 (100)	5.20 (132)	2.56 (65)	8.46 (215)
68514480297	HS50	787 to 1,888 (3,500 to 8,400)	11.34 (288)	14.06 (357)	5.12 (130)	.71 x 1.50 (18 x 38)	5.12 (130)	7.00 (178)	1.50 (38)	4.72 (120)	6.50 (165)	1.97 (50)	10.24 (260)
68514480298	HS50-2	1,350 to 3,147 (6,000 to 14,000)							1.69 (43)	7.87 (200)	9.84 (250)	2.76 (70)	

Notes: ■ After one year, the specified cold flow will occur at the maximum allowable compressible load range.

■ The OSC Mounts shown shaded in gray may be "Mixed & Matched" as required to achieve proper loading.

UPC #	Type	Natural Frequency G Min - G Max (Hz)	Dynamic spring value		Capacity limits @ different RPM						Materials / Finish		
					720 RPM		960 RPM		1440 RPM		Inner Square & Arms	Outer Housing	Finish
			cd	cd	sw Max (mm)	K Max (mm)	sw Max (mm)	K Max (mm)	sw Max (mm)	K Max (mm)			
			Vertical	Horizontal									
			( N/mm )	( N/mm )									
68514481702	HS27	4.2-3.8	65	32	12	3.5	10	5.2	8	9.3	Steel welded construction	Cast Iron	Painted RunRight Safety Blue
68514481703	HS38	3.6-3.3	95	46	15	4.3	13	6.7	8	9.3			
68514481704	HS45	3.3-3.0	142	70	17	4.9	14	7.2	8	9.3			
68514480297	HS50	3.2-3.0	245	120	18	5.2	15	7.7	8	9.3			
68514480298	HS50-2	3.2-2.9	410	200	18	5.2	15	7.7	8	9.3			

Notes: ■ It is recommended that HS Hanging Mounts be fastened with Class 8.8 or greater fasteners.

■ Dynamic spring values at 960 rpm and deflection of 8mm at nominal loads.

■ It is not recommended to exceed accelerations greater than 9.3g.

■ The Oscillation Mounts HS must be fastened with Grade 8 bolt utilizing all mounting holes or slots.

■ See pages 34 and 35 for additional product and performance data.

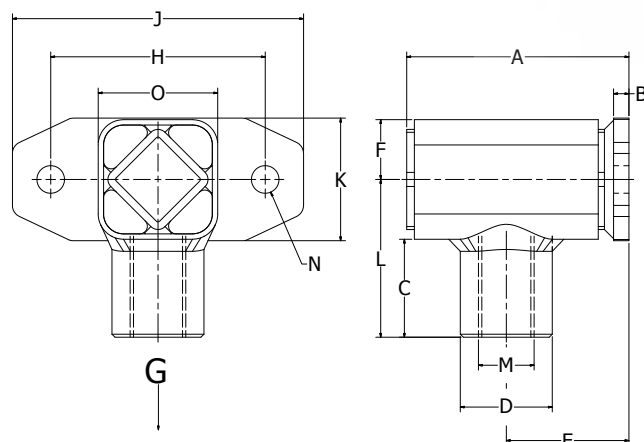
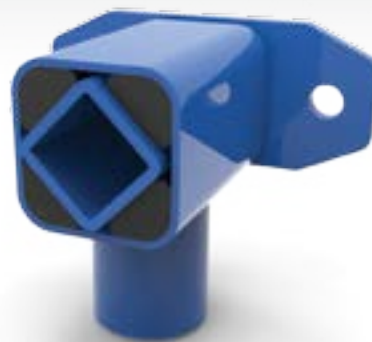


# Oscillating Mounts

## AU

### RunRight™ Oscillation Mounts AU

The RunRight™ Oscillation Mounts AU are a single rocker design used on eccentric oscillator drive systems for either supporting or suspending vibratory conveyors, screens, or feeder equipment. The outer housings and inner squares are manufactured out of steel. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Maximum Load Capacity Chart

AU Size	Maximum Rocker Load G (Nm)				Maximum revolutions n <sub>s</sub> (RPM)*	
	K < 2	K = 2	K = 3	K = 4	α ± 5°	α ± 6°
15	100	75	60	50	640	480
18	200	150	120	100	600	450
27	400	300	240	200	560	420
38	800	600	500	400	530	390
45	1600	1200	1000	800	500	360
50	2500	1800	1500	1200	470	340
60	5000	3600	3000	2400	440	320

Notes: ■\*See Allowable Element Frequencies page 6.

■ Contact Lovejoy for permissible load values from greater accelerations and for rocker arms with higher load capacities.

■ Revolutions are between 300 to 600 RPM with a maximum oscillation angle of ±6°.

■ The oscillation angle α of all rockers and the drive head need to be within the allowable range for n<sub>s</sub> and α.

Oscillating Mounting Type AU

UPC #	Type	G Max lbs (N)	Mdd ft-lbs/° (Nm/°)	Dimensions - Inches (mm)												
				A	B	C	D	E	F	H	J	K	L	M	N	O
68514425158	AU15 RH	22.5	0.3	1.97	0.16	1.14	0.87	1.10	0.53	1.97	2.76	0.98	1.57	M10	0.28	1.06
68514425187	AU15 LH	(100)	(0.4)	(50)	(4)	(29)	(22)	(28)	(14)	(50)	(70)	(25)	(40)	M10-LH	(7)	(27)
68514424854	AU18 RH	45	1.0	2.44	0.20	1.14	0.98	1.34	0.63	2.36	3.35	1.38	1.77	M12	0.37	1.26
68514425188	AU18 LH	(200)	(1.3)	(62)	(5)	(29)	(25)	(34)	(16)	(60)	(85)	(35)	(45)	M12-LH	(10)	(32)
68514425160	AU27 RH	89.9	1.9	2.87	0.20	1.48	1.38	1.57	0.89	3.15	4.33	1.77	2.36	M16	0.45	1.77
68514425189	AU27 LH	(400)	(2.6)	(73)	(5)	(38)	(35)	(40)	(23)	(80)	(110)	(45)	(60)	M16-LH	(11.5)	(45)
68514425161	AU38 RH	180	4.9	3.74	0.24	2.09	1.97	2.05	1.18	3.94	5.51	2.36	3.15	M20	0.55	2.36
68514425190	AU38 LH	(800)	(6.7)	(95)	(6)	(53)	(50)	(52)	(30)	(100)	(140)	(60)	(80)	M20-LH	(14)	(60)
68514425162	AU45 RH	360	8.6	4.72	0.24	2.64	1.89	2.60	1.73	5.12	7.09	2.76	3.94	M24	0.71	3.50
68514425191	AU45 LH	(1,600)	(11.6)	(120.0)	(6)	(67)	(48)	(66)	(44)	(130)	(180)	(70)	(100)	M24-LH	(18)	(89)
68514425163	AU50 RH	562	15.0	5.71	0.39	2.60	2.36	3.15	1.54	5.51	7.48	3.15	4.06	M36	0.71	3.66
68514425192	AU50 LH	(2,500)	(20.4)	(145.0)	(10)	(66)	(60)	(80)	(39)	(140)	(190)	(80)	(103)	M36-LH	(18)	(93)
68514425164	AU60 RH	1124	28.2	9.17	0.63	3.11	3.15	5.04	2.01	7.09	9.06	4.72	5.12	M42	0.71	4.00
68514425193	AU60 LH	(5,000)	(38.2)	(233.0)	(16)	(79)	(80)	(128)	(51)	(180)	(230)	(120)	(130)	M42-LH	(18)	(102)

Notes: ■ G = Maximum load per element.

■ Mdd = Dynamic element torque @ ±5° in a speed range of 300-600 RPM.

■ See pages 34 and 35 for additional product and performance data.

### Rocker Oscillation Angle Calculation

Eccentric Radius: R (in)

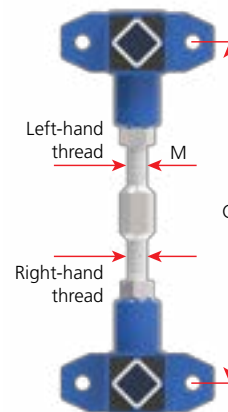
Center Distance: C (in)

Oscillation Angle: α ± (°)

$$\alpha = \arctan\left(\frac{R}{C}\right)$$

### Connection Rod

Customers must provide their own connection rods. It is recommended to use both right-handed and left-handed threaded rods with corresponding right-handed and left-handed AU Oscillating Mounts. When using both right and left-handed threaded rods, the length of the rockers can be easily adjusted, and lateral sliding of the trough will be avoided. The center distance between housings must be identical for all of the equipment rocker arms. The thread must be engaged in each of the housings, 1.5 times the diameter of the connection rod, as shown in the diagram to the right.



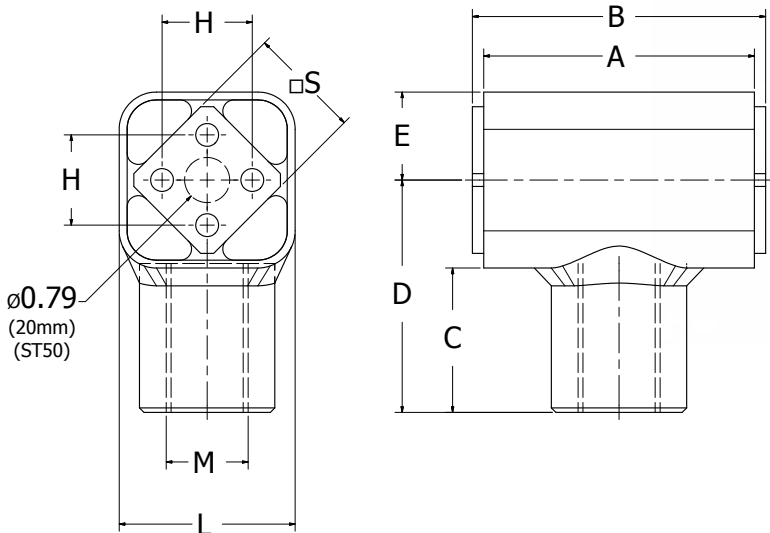
# Oscillating Mounts

## ST Drive Heads



### RunRight™ ST Drive Heads

The RunRight™ ST is a drive head design which transmits power from an eccentric, through the connecting rod and flexible head, to activate vibratory conveyors, screens, or feeder apparatus and equipment. The outer housings are manufactured steel weldments and the inner squares are aluminum. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Drive Heads Type ST														
UPC #	Type	F Max lbs (N)	RPM @ Max @ 5°	Dimensions - Inches (mm)										
				A	B	C	D	E	H	J	K	L	M	S
68514425165	ST18 RH	90	600	1.97	2.17	1.24	1.77	0.79	0.47	0.24	0.87	1.54	M12	0.71
68514425194	ST18 LH	(400)		(50)	(55)	(31.5)	(45)	(20)	(12)	(6)	(22)	(39)	M12LH	(18)
68514425166	ST27 RH	225	560	2.36	2.56	1.59	2.36	1.06	0.79	0.31	1.10	2.13	M16	1.06
68514425195	ST27 LH	(1,000)		(60)	(65)	(40.5)	(60)	(27)	(20)	(8)	(28)	(54)	M16LH	(27)
68514425167	ST38 RH	450	530	3.15	3.54	2.09	3.15	1.46	0.98	0.39	1.65	2.91	M20	1.50
68514425196	ST38 LH	(2,000)		(80)	(90)	(53)	(80)	(37)	(25)	(10)	(42)	(74)	M20LH	(38)
68514424851	ST45 RH	787	500	3.94	4.33	2.64	3.94	1.73	1.38	0.47	1.89	3.50	M24	1.77
68514425197	ST45 LH	(3,500)		(100)	(110)	(67)	(100)	(44)	(35)	(12)	(48)	(89)	M24LH	(45)
68514424852	ST50 RH	1,350	470	4.72	5.12	2.76	4.13	1.89	1.57	M12 X	2.36	3.66	M36	1.97
68514425198	ST50 LH	(6,000)		(120)	(130)	(69.5)	(105)	(47)	(40)	40	(60)	(93)	M36LH	(50)

Notes: ■ Higher RPM's can be achieved if the oscillation angle is less than +/-5°. ■ See pages 34 and 35 for additional product and performance data.

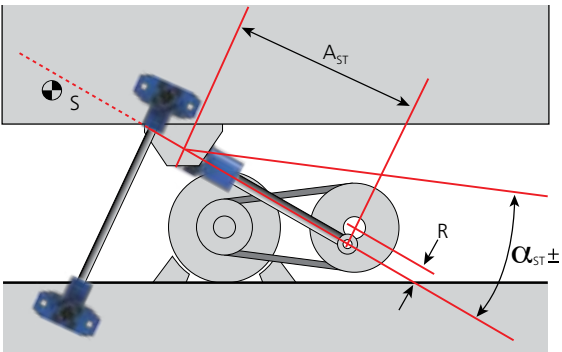
### Drive Rod Length

The oscillation angle cannot exceed +/-5.7° to meet permissible frequency guidelines. The oscillation angle corresponds to the ratio of R:A<sub>ST</sub> by 1:10.

### ST Oscillation Angle Calculation

Eccentric Radius: R (mm)  
Center Distance: A<sub>ST</sub> (mm)  
Oscillation Angle: α<sub>ST</sub> (°)

$$\alpha_{st} = \arcsin\left(\frac{R}{A_{st}}\right)$$



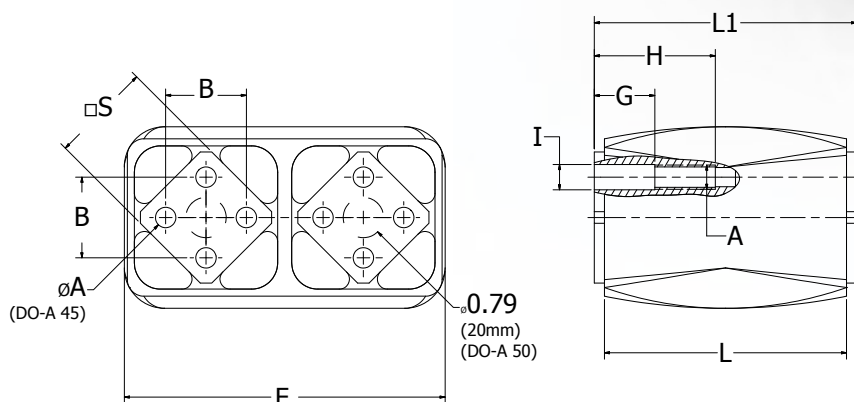
# Oscillating Mounts

## DO-A Spring Accumulators

**RunRight™**  
by **Lovejoy**

### RunRight™ DO-A Spring Accumulators

The RunRight™ DO-A are highly dynamic spring accumulators, designed for feeder systems that operate near resonance frequency. They are manufactured with cast iron housings and aluminum inner squares. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.

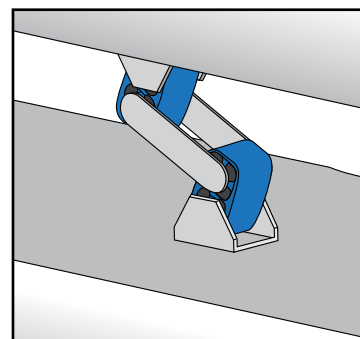


Spring Accumulators Type DO-A													
UPC #	Type	C <sub>s</sub> in-lbs (N/mm)	Dimensions - Inches (mm)										
			A	B	D	E	F	I	S	G	H	L	L1
68514425132	DO-A 45x100	571 (100)	0.47 (12)	1.38 (35)	3.35 (85)	2.87 (73)	5.90 (150)	—	1.77 (45)	—	—	3.17 (80)	3.54 (90)
68514425133	DO-A 45x150	713 (125)								—	—	3.94 (100)	4.33 (110)
68514457671	DO-A 50x120	1,084 (190)	M12	1.57 (40)	3.54 (90)	3.07 (78)	6.26 (159)	0.48 (12.25)	1.97 (50)	1.18 (30)	2.36 (60)	4.72 (120)	5.12 (130)
68514484850	DO-A 50x160	1,284 (225)								1.18 (30)	2.36 (60)	6.30 (160)	6.69 (170)
68514457672	DO-A 50x200	1,827 (320)								1.57 (40)	2.76 (70)	7.87 (200)	8.27 (210)

Notes: ■ C<sub>s</sub> = dynamic spring value of the complete accumulator oscillating at an angle of ±5° and between 300-600 RPM (n<sub>s</sub>).  
 ■ See pages 34 and 35 for additional product and performance data.

1 spring accumulator consists of two (2) DO-A elements.

Operating parameters								
Angle of Oscillation (DO-A series connection)	Accumulator = 2x DO-A 45				Accumulator = 2x DO-A 50			
	R	sw	Max n <sub>s</sub>	Max K	R	sw	Max n <sub>s</sub>	Max K
±6°	15.3	30.6	360	2.2	16.4	32.8	340	2.1
±5°	12.8	25.6	500	3.6	13.6	27.2	470	3.4
±4°	10.2	20.4	740	6.2	10.9	21.8	700	6.0



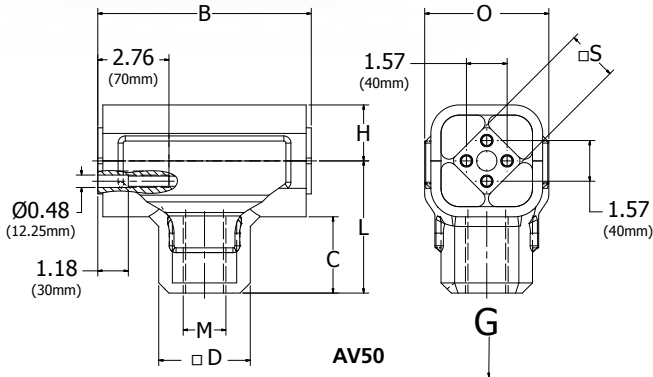
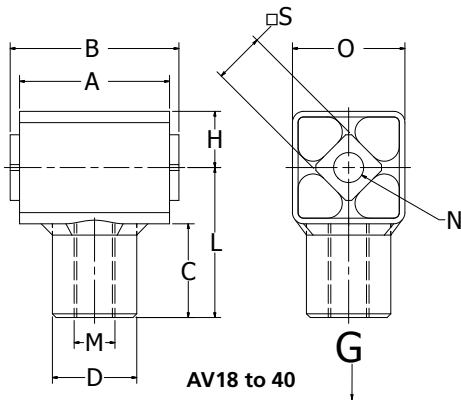
# Oscillating Mounts

## AV



### RunRight™ Oscillation Mounts AV

The RunRight™ Oscillation Mounts AV have larger than standard elastomeric elements, and are designed for free-hanging gyratory sifting machines. The outer housings are manufactured steel weldment and the inner squares are aluminum. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Drive Heads Type AV												
UPC #	Type	G Max lbs (N)	Dimensions - Inches (mm)									
			A	B	C	D	H	L	M	N	O	S
68514463374	AV18 RH	135-360 (600-1,600)	2.36	2.56	1.59	1.10	1.06	1.54	M16	0.51	0.71	2.13
68514463375	AV18 LH		(60)	(65)	(40.5)	(28)	(27)	(39)	M16LH	(13)	(54)	(18)
68514463376	AV27 RH	290-675 (1,300-3,000)	3.15	3.54	2.09	1.65	1.46	2.13	M20	0.63	0.71	2.91
68514463377	AV27 LH		(80)	(90)	(53)	(42)	(37)	(54)	M20LH	(16)	(74)	(27)
68514463378	AV38 RH	585-1,125 (2,600-5,000)	3.94	4.33	2.64	1.89	1.73	2.91	M24	0.79	0.71	3.50
68514463379	AV38 LH		(100)	(110)	(67)	(48)	(44)	(74)	M24LH	(20)	(89)	(38)
68514463940	AV40 RH	1,000-1,685 (4,500-7,500)	4.72	5.12	2.76	2.36	1.89	3.50	M36	0.79	0.71	3.66
68514463939	AV40 LH		(120)	(130)	(69.5)	(60)	(47)	(89)	M36LH	(20)	(93)	(45)
68514463382	AV50 RH	1,350-3,600 (6,000-16,000)	7.87	8.28	3.35	3.15	2.36	3.66	M42	-	0.71	4.57
68514463383	AV50 LH		(200)	(210)	(85)	(80)	(59)	(93)	M42LH		(116)	(50)

Note: ■ See pages 34 and 35 for additional product and performance data.

### Application Example: Free-hanging Sifting Machine

#### Rocker Oscillation Angle Formula

Eccentric Radius (circular oscillation): R (0.8 in)  
Length of Connection Rod: L (24 in)  
Oscillation Angle (cannot exceed ±2°): β ± (1.9°)

$$\beta = \arctan\left(\frac{R}{L}\right)$$

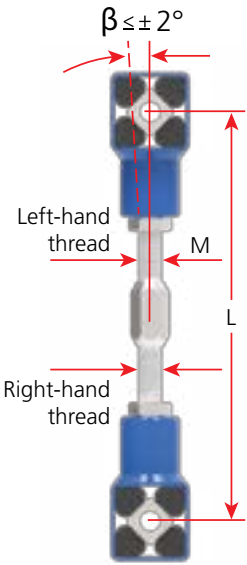
#### Required Load For Each Suspension Rod Formula

Oscillating Mass Including Material: m (1,764 lb)  
Number of Suspension Rods: s (4)  
Load per Suspension Rod: G (441 lb)  
Maximum Load Capacity per Suspension Rod: G Max (674 lb)  
Eight AV27 Oscillating Mounts are required for this application.

$$G = \left(\frac{m}{s}\right)$$

### Connection Rod

Customers must provide their own connection rods. It is recommended to use both right-handed and left-handed threaded rods with corresponding right-handed and left-handed AV Oscillating Mounts. When using both right and left-handed threaded rods, the length of the rockers can be easily adjusted and lateral sliding of the trough will be avoided. The center distance between housings must be identical for all of the equipment rocker arms. The thread must be engaged in each of the housings, 1.5 times the diameter of the connection rod, as shown in the diagram to the right.



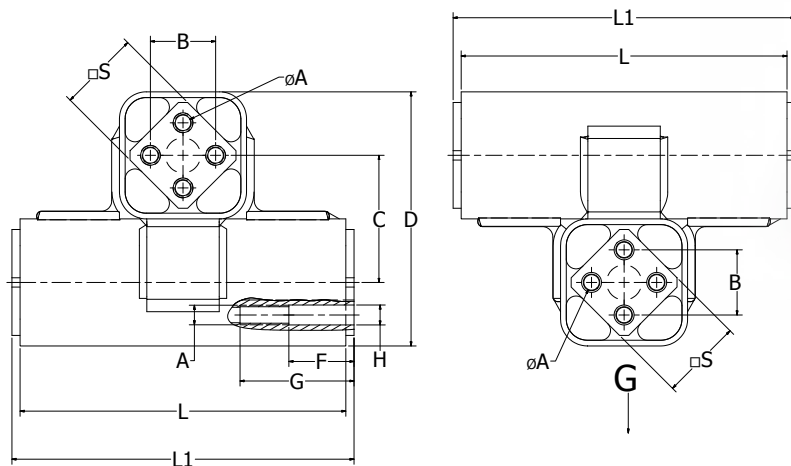
# Oscillating Mounts

## AK

**RunRight™**  
by **Lovejoy**

### RunRight™ Oscillation Mounts AK

The RunRight™ Oscillation Mounts AK are designed for supporting or suspending gyratory sifting machines. The outer housings and inner squares are manufactured out of aluminum. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



#### Universal Joints Type AK

UPC #	Type	G load Max in lbs (N)			Dimensions - Inches (mm)									
		Hanging	Crank driven	Free oscillating	A	B	C	D	F	G	H	L	L1	S
68514425220	AK15	36 (160)	29 (128)	18 (80)	0.20 (5)	0.39 (10)	1.06 (27)	2.13 (54)	—	—	—	2.36 (60)	2.56 (65)	0.59 (15)
68514425221	AK18	67 (300)	54 (240)	34 (150)	0.24 (6)	0.47 (12)	1.26 (32)	2.52 (64)	—	—	—	3.15 (80)	3.35 (85)	0.71 (18)
68514425222	AK27	180 (800)	144 (640)	90 (400)	0.31 (8)	0.79 (20)	1.77 (45)	3.54 (90)	—	—	—	3.94 (100)	4.13 (105)	1.06 (27)
68514425223	AK38	360 (1,600)	288 (1,280)	180 (800)	0.39 (10)	0.98 (25)	2.36 (60)	4.72 (120)	—	—	—	4.72 (120)	5.12 (130)	1.50 (38)
68514425224	AK45	670 (3,000)	540 (2,400)	335 (1,500)	0.47 (12)	1.38 (35)	2.95 (75)	5.91 (150)	—	—	—	5.91 (150)	6.30 (160)	1.77 (45)
68514425225	AK50	1,260 (5,600)	1,010 (4,480)	630 (2,800)	M12	1.57 (40)	3.07 (78)	6.14 (156)	1.58 (40)	2.76 (70)	0.48 (12.25)	7.87 (200)	8.27 (210)	1.97 (50)
68514425226	AK60	2,250 (10,000)	1,800 (8,000)	1,125 (5,000)	M16	1.77 (45)	3.94 (100)	7.87 (200)	1.97 (50)	3.15 (80)	0.65 (16.5)	11.81 (300)	12.20 (310)	2.36 (60)
68514425227	AK80	4,500 (20,000)	3,600 (16,000)	2,250 (10,000)	M20	2.36 (60)	5.35 (136)	10.71 (272)	1.97 (50)	3.54 (90)	0.81 (20.5)	15.75 (400)	16.14 (410)	3.15 (80)
68514457674	AK100-4	6,750 (30,000)	5,400 (24,000)	3,375 (15,000)	M24	2.95 (75)	6.69 (170)	13.39 (340)	1.97 (50)	3.94 (100)	0.98 (25)	15.75 (400)	16.14 (410)	3.94 (100)
68514457675	AK100-5	9,000 (40,000)	7,200 (32,000)	4,500 (20,000)	M24	2.95 (75)	6.69 (170)	13.39 (340)	1.97 (50)	3.94 (100)	0.98 (25)	19.68 (500)	20.08 (510)	3.94 (100)

Notes: ■ G is the maximum load per support.

■ Drive speed should not exceed 380 RPM.

■ Oscillation angle should not exceed  $\pm 3.5^\circ$ .

■ Operating requirements should not exceed recommendations on Allowable Element Frequencies page 6.

■ See pages 34 and 35 for additional product and performance data.

### Application Example: Supported Sifter with Positive Crank Drive

#### Rocker Oscillation Angle Formula

Eccentric Radius (circular oscillation): R (1 in)

Length of Connection Rod: L (24 in)

Revolutions:  $n_s$  (240 RPM)

Oscillation Angle (cannot exceed  $\pm 3.5^\circ$ ):  $\alpha \pm (2.4^\circ)$

$$\alpha = \arctan\left(\frac{R}{L}\right)$$

#### Required Load For Each Suspension Rod Formula

Oscillating Mass Including Material: m (3,500 lb)

Number of Suspension Rods: s (4)

Load per Suspension Rod: G (875 lb)

Maximum Load Capacity per Suspension Rod: G Max (1,010 lb)

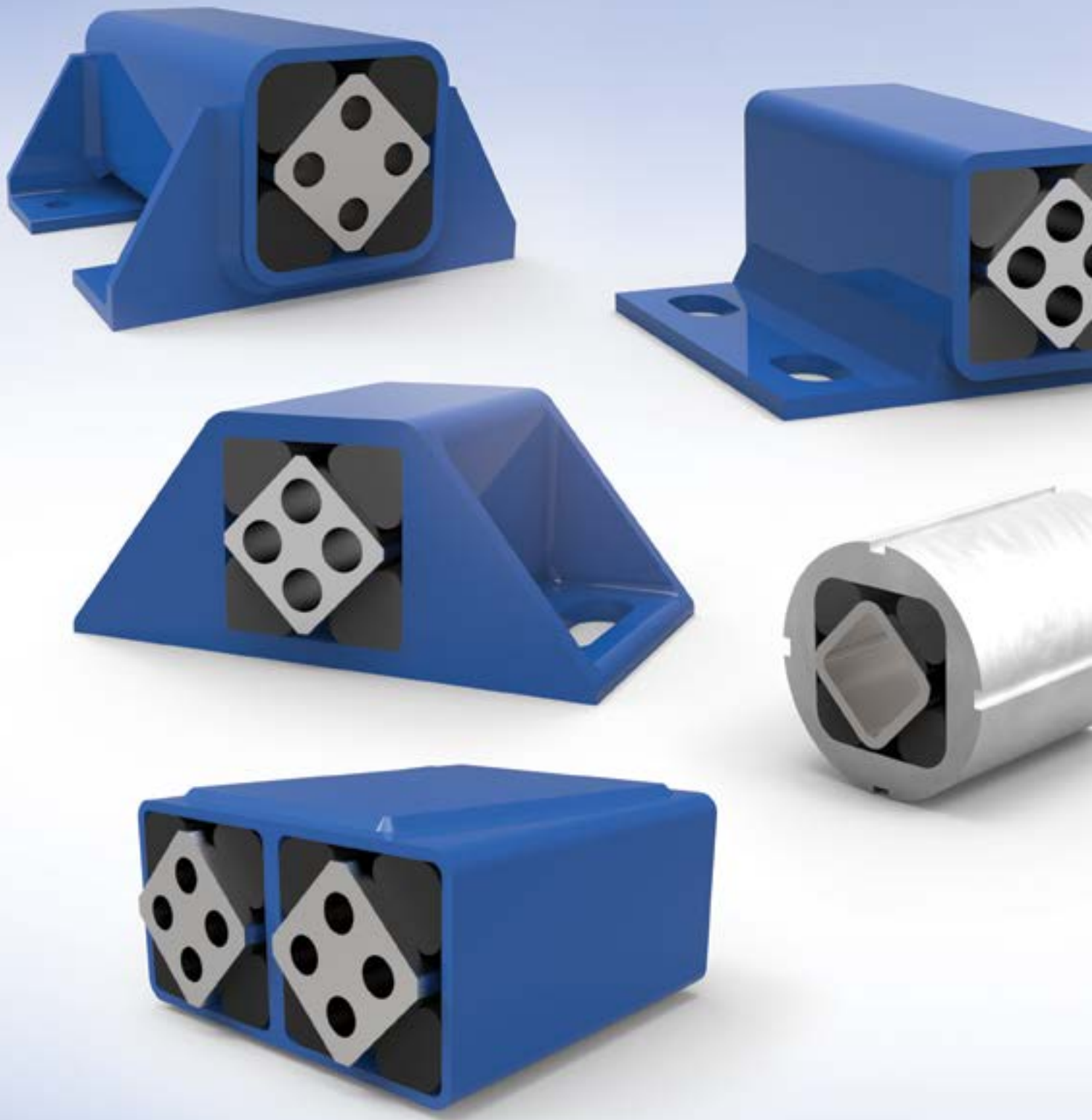
Eight AK50 Oscillating Mounts are required for this application.

$$G = \left(\frac{m}{s}\right)$$



# RunRight<sup>TM</sup>

by **Lovejoy**



RUBBER SUSPENSION

Lovejoy, Inc has made every effort to assure the accuracy of the information contained in this catalog. However, Lovejoy, Inc. expressly disclaims any and all liability for the contents of this catalog including, but not limited to, errors, inaccuracies, misstatements, omissions and any incidental or consequential damages which may occur as the result of relying on this information. Lovejoy reserves the right to change specifications and information without notice.

# Rubber Suspension Units

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## Safety Warning



When using Lovejoy products, you must follow these instructions and take the following precautions. Failure to do so may cause the power transmission product to break and parts to be thrown with sufficient force to cause severe injury or death.

Refer to this Lovejoy Catalog for proper selection, sizing, horsepower, torque range, and speed range of power transmission products, including elastomeric elements for couplings. Follow the installation instructions included with the product, and in the individual product catalogs for proper installation of power transmission products. Do not exceed catalog ratings.



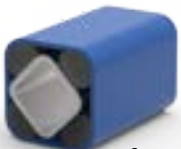


















Do not use any of these power transmission products for elevators, man lifts, or other devices that carry people. If the

power transmission product fails, the lift device could fall resulting in severe injury or death.

For all power transmission products, you must install suitable guards in accordance with OSHA and American Society of Mechanical Engineers Standards. Do not start power transmission product before suitable guards are in place. Failure to properly guard these products may result in severe injury or death from personnel contacting moving parts or from parts being thrown from assembly in the event the power transmission product fails.

If you have any questions, contact the Lovejoy Engineering Department at 1-630-852-0500.

# Rubber Suspension Units Selection Guide

		Inner Square Type			Accessories for Housings Zinc Plated Steel
		A Size 15-50 = Aluminum Size 60+ = Steel	C Aluminum	S Steel Tube	
Outer Housing Type	DR Steel Tube	DR-A 15 to 50  See page 52	DR-C 15 to 50  See page 52	DR-S 11 to 50  See page 53	BR11 to BR50 Bracket  See page 53
	DK Aluminum	DK-A 15 to 50  See page 54	DK-C  Special Request Only	DK-S 11 to 50  See page 54	BK11 to BK50 Bracket  See page 54
	DW Cast Iron	DW-A 15 to 50  See pages 55 & 56	DW-C 15 to 38  See page 55	DW-S 15 to 50  Special Request Only	Accessories for Inner Square type A Zinc Plated Steel
	DW Steel Weldment	DW-A 15 to 100  See pages 55 & 56	DW-C 45 to 100  Special Request Only	DW-S 45-100  Special Request Only	
	DO Cast Iron	DO-A 15 to 50  See page 57	DO-C 15 to 50  Special Request Only	DO-S 15 to 50  Special Request Only	
	DO Steel Weldment	DO-A 15 to 45  See page 57	DO-C 15 to 50  Special Request Only	DO-S 15 to 50  Special Request Only	WS11 to WS50 Bracket  See page 58
Notes:		<ul style="list-style-type: none"><li>■ Recommended for applications that oscillate more than ±10° across the neutral element position.</li><li>■ Sizes 15 through 45 are fastened using nuts and bolts that reach completely through the inner square.</li><li>■ Sizes 50 and up are fastened using bolts threaded into each end of the inner square.</li></ul>	<ul style="list-style-type: none"><li>■ Recommended for applications that do not oscillate more than ±10° across the neutral element position.</li><li>■ Elements are friction locked into place by a single center bolt, allowing for 360° positioning.</li></ul>	<ul style="list-style-type: none"><li>■ Recommended for Plug-In connection with the inner square.</li><li>■ Plug-In length must be a min. of 2x the width across the flats of the inner square.</li><li>■ The Plug-In connections are NOT recommended for applications that experience back and forth oscillations across the neutral element position.</li></ul>	
		<ol style="list-style-type: none"><li>1. DO NOT weld the rubber suspension units. The heat will affect or destroy the rubber elements. Please contact Lovejoy for customized units.</li><li>2. Many of the rubber suspension units can be supplied in stainless steel, zinc plated or painted for your specific application. Please contact Lovejoy for customized units.</li><li>3. Mounting hardware must have a minimum strength Class of 8.8.</li></ol>			

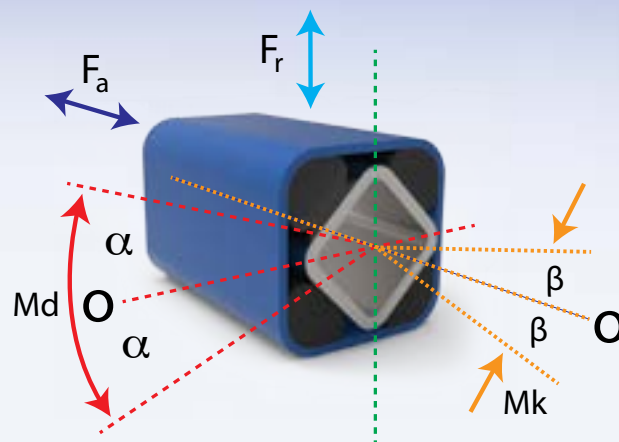
RUBBER SUSPENSION

# Rubber Suspension Units

## Torque Chart

### RunRight™ Rubber Suspension Units Torque Chart

The chart below gives statically measured torques at a specific force and deflection for the Tensys™ 10 rubber used in the RunRight™ Rubber Suspension units. If needed, other values can be interpolated. Please contact Lovejoy for applications that have combined dynamic forces and high oscillation angles, or refer to pages 4 to 7 in this catalog.



Element			Torque						Cardanic	Radial		Axial	
Nominal size	x	Length	Md [Nm] angle $\pm\alpha^\circ$						Mk [Nm] angle $\pm\beta^\circ$	Deflection $\pm s_r$	Load $F_r$	Deflection $\pm s_a$	Load $F_a$
			5°	10°	15°	20°	25°	30°		[mm]	[N]	[mm]	[N]
11	x	20	0.3	0.8	1.3	2.0	2.9	4.0	0.4	0.25	200	0.25	60
11	x	30	0.4	1.2	2.0	3.1	4.3	6.0	1.1		340		80
11	x	50	0.7	2.0	3.4	5.1	7.2	10.0	5.6		600		150
15	x	25	0.7	1.6	2.6	4.0	5.7	8.2	0.6	0.25	200	0.25	70
15	x	40	1.1	2.5	4.2	6.4	9.2	13.2	2.0		300		100
15	x	60	1.6	3.8	6.3	9.6	13.8	19.8	5.5		500		160
18	x	30	1.9	4.5	7.5	11.0	15.0	20.6	1.6	0.25	400	0.25	80
18	x	50	3.2	7.5	12.5	18.3	25.0	34.4	7.0		700		160
18	x	80	5.1	12.0	20.0	29.3	40.0	55.0	28.0		1,000		300
27	x	40	4.7	10.7	17.5	26.9	39.5	57.0	3.8	0.5	800	0.50	200
27	x	60	7.0	16.0	26.3	40.3	59.3	85.5	11.5		1,300		300
27	x	100	11.7	26.7	43.8	67.2	98.8	142.5	48.0		2,400		600
38	x	60	13.0	30.4	50.6	78.0	113.0	162.0	11.4	0.5	1,500	0.50	300
38	x	80	17.3	40.5	67.5	104.0	151.0	216.0	24.7		2,000		500
38	x	120	26.0	60.8	101.2	156.0	226.0	324.0	76.0		3,000		600
45	x	80	27.6	62.4	104.0	160.0	222.0	320.0	28.0	0.5	1,900	0.50	560
45	x	100	34.5	78.0	130.0	200.0	278.0	400.0	54.0		3,000		700
45	x	150	51.8	117.0	195.0	300.0	420.0	600.0	140.0		4,800		1,000
50	x	120	51.0	133.0	250.0	395.0	570.0	780.0	80.0	0.5	2,800	0.50	800
50	x	160	77.0	197.0	363.0	570.0	820.0	1,115.0	145.0		4,500		950
50	x	200	102.0	260.0	475.0	745.0	1,070.0	1,450.0	250.0		6,300		1,100
50	x	300	150.0	385.0	700.0	1,100.0	1,590.0	2,160.0	1,200.0	1.0	8,600	1.00	2,200
60	x	150	75.0	170.0	300.0	460.0	700.0	1,010.0	90.0		5,400		1,600
60	x	200	95.0	220.0	385.0	610.0	930.0	1,380.0	250.0		7,200		2,200
60	x	300	140.0	365.0	630.0	995.0	1,550.0	2,240.0	900.0	1.0	9,400	1.00	3,200
70	x	200	140.0	380.0	650.0	1,040.0	1,490.0	2,120.0	280.0		9,000		2,200
70	x	300	190.0	525.0	910.0	1,470.0	2,160.0	3,150.0	1,200.0		12,000		3,600
70	x	400	250.0	765.0	1,315.0	2,160.0	3,175.0	4,750.0	2,200.0	1.0	14,000	1.00	4,000
80	x	200	200.0	500.0	850.0	1,300.0	1,900.0	2,700.0	680.0		10,000		2,500
80	x	300	300.0	800.0	1,300.0	2,000.0	2,900.0	4,100.0	1,500.0		15,000		3,800
80	x	400	400.0	1,060.0	1,800.0	2,800.0	3,900.0	5,600.0	4,600.0	1.0	19,000	1.00	4,700
100	x	250	400.0	1,080.0	1,800.0	2,800.0	4,100.0	6,300.0	1,200.0		15,000		3,200
100	x	400	640.0	1,700.0	2,900.0	4,500.0	6,600.0	10,000.0	4,300.0		28,000		5,800
100	x	500	800.0	2,160.0	3,600.0	5,600.0	8,200.0	12,000.0	8,000.0		38,000		7,500

# Rubber Suspension Units

## DR-A, DR-C



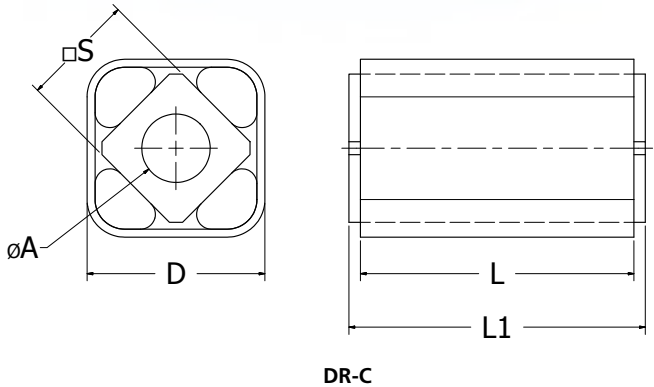
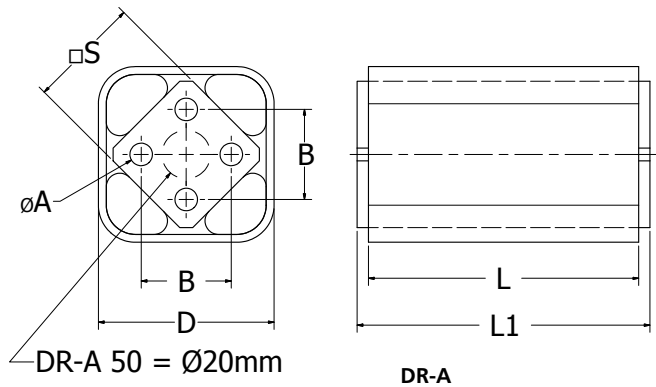
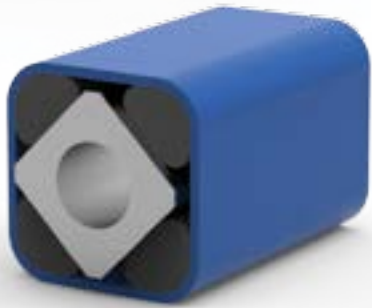
### RunRight™ Rubber Suspension Unit DR-A

The RunRight™ Rubber Suspension Unit DR-A has 4 bore holes in the inner square and is designed to transmit alternating motions from the neutral position. A bolt through either two, or all four of the bore holes, can be used to mount a lever to either one or both sides of the unit. They are manufactured with steel housings and an aluminum inner square. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



### RunRight™ Rubber Suspension Unit DR-C

The RunRight Rubber Suspension Unit DR-C has one central bore and can be positioned between 0° and 360°. The frictional force of this unit guarantees a secure connection of the lever arms in any position. They are manufactured with steel housings and an aluminum inner square. They have standard Tensys 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Rubber Suspension Units DR-A, DR-C									
DR-A				DR-C			Dimensions - Millimeters		
UPC #	Type	Dimensions - Millimeters		UPC #	Type	Dimensions - Millimeters	D	S	L
		A	B						
68514425013	DR-A 15x25	5	10	68514463628	DR-C 15x25	10	27	15	25
68514425014	DR-A 15x40			68514463629	DR-C 15x40				40
68514417485	DR-A 15x60			68514463630	DR-C 15x60				60
68514424839	DR-A 18x30	6	12	68514463631	DR-C 18x30	13	32	18	30
68514425017	DR-A 18x50			68514463632	DR-C 18x50				50
68514425018	DR-A 18x80			68514463633	DR-C 18x80				80
68514425019	DR-A 27x40	8	20	68514437571	DR-C 27x40	16	45	27	40
68514425020	DR-A 27x60			68514437572	DR-C 27x60				60
68514417487	DR-A 27x100			68514437573	DR-C 27x100				100
68514425022	DR-A 38x60	10	25	68514437574	DR-C 38x60	20	60	38	60
68514425023	DR-A 38x80			68514437575	DR-C 38x80				80
68514425024	DR-A 38x120			68514437576	DR-C 38x120				120
68514484305	DR-A 45x80	12	35	68514463634	DR-C 45x80	24	75	45	80
68514484306	DR-A 45x100			68514463635	DR-C 45x100				100
68514484307	DR-A 45x150			—	—				150
68514484308	DR-A 50x120	M12x40	40	68514463834	DR-C 50x120	30	80	50	120
68514484309	DR-A 50x200			68514463924	DR-C 50x200				200
68514484310	DR-A 50x300			—	—				300

Note: ■ See pages 50 and 51 for additional product and performance data.

RUBBER SUSPENSION



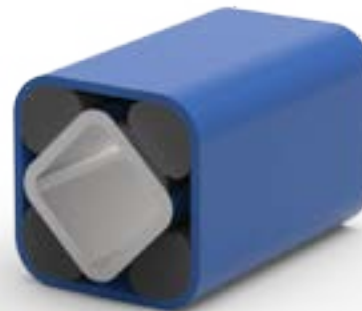
# Rubber Suspension Units

## DR-S, BR Brackets

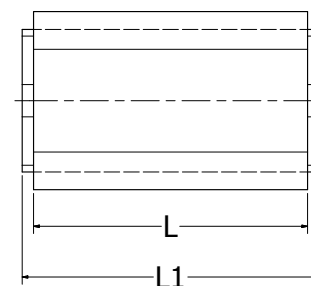
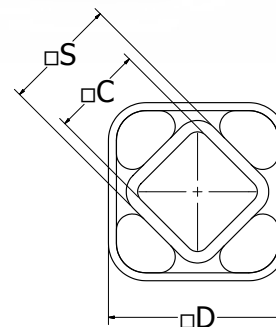
**RunRight™**  
by **Lovejoy**

### RunRight™ Rubber Suspension Unit DR-S

The RunRight™ Rubber Suspension Unit DR-S is perfect for square lever arms. The length of the inserted lever arm needs to be three times that of dimension C, as shown in the drawing to the right. Only one through-bolt is required on the smaller units through the DR-S 18. Frictional force is used to secure the lever arms at any position within 360°. They are manufactured with steel housings and inner squares. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.

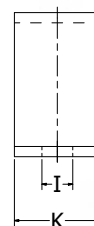
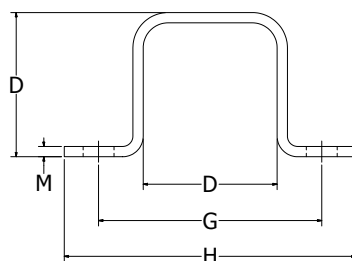


Rubber Suspension Units DR-S						
UPC #	Type	Dimensions - Millimeters				
		C	D	S	L	L1
68514425031	DR-S 11x20	8	20	11	20	25
68514425032	DR-S 11x30				30	35
68514425033	DR-S 11x50				50	55
68514425034	DR-S 15x25	11	27	15	25	30
68514425035	DR-S 15x40				40	45
68514425036	DR-S 15x60				60	65
68514425037	DR-S 18x30	12	32	18	30	35
68514425038	DR-S 18x50				50	55
68514425039	DR-S 18x80				80	85
68514425040	DR-S 27x40	22	45	27	40	45
68514425041	DR-S 27x60				60	65
68514425042	DR-S 27x100				100	105
68514425043	DR-S 38x60	30	60	38	60	70
68514425044	DR-S 38x80				80	90
68514425045	DR-S 38x120				120	130
68514484060	DR-S 45x80	35	75	45	80	90
68514425047	DR-S 45x100				100	110
68514484064	DR-S 45x150				150	160
68514425049	DR-S 50x120	40	80	50	120	130
68514425050	DR-S 50x200				200	210
68514425051	DR-S 50x300				300	310



### RunRight™ BR Brackets

The RunRight BR Bracket is for positioning and securing all DR suspension units. These steel clamps are supplied separately and do not include bolts. Lovejoy recommends using two or more clamps on the longer DR suspension units.



BR Brackets							
UPC #	Type	Dimensions - Millimeters					
		D	G	H	I	K	M
68514425000	BR11	20	37	50	6	20	2.0
68514425001	BR15	27	50	65	7	25	2.0
68514424840	BR18	32	60	80	9	30	2.5
68514425003	BR27	45	80	105	11	35	3.0
68514425004	BR38	60	100	125	13	40	4.0
68514424664	BR45	75	120	150	13	45	5.0
68514463479	BR50	80	135	175	18	50	6.0

Note: ■ See pages 50 and 51 for additional product and performance data.

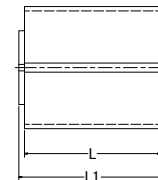
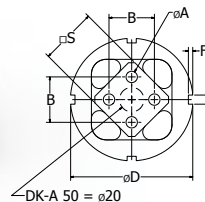
# Rubber Suspension Units

## DK-A, DK-S, BK Brackets

**RunRight™**  
by **Lovejoy**

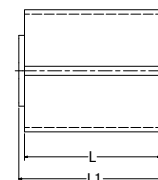
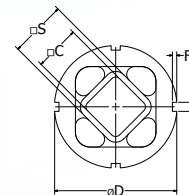
### RunRight™ Rubber Suspension Unit DK-A

The RunRight™ Rubber Suspension Unit DK-A has 4 bore holes in the inner square and is designed to transmit alternating motions from the neutral position. A bolt through either two, or all four of the bore holes, can be used to mount a lever to either side of the unit. They are manufactured with aluminum housings and inner squares. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



### RunRight™ Rubber Suspension Unit DK-S

The RunRight Rubber Suspension Unit DK-S is perfect for square lever arms. The length of the inserted lever arm needs to be three times that of dimension C, as shown in the drawing to the right. This kind of connection is great for plus or minus angular motions. These units cannot take alternating motions across the neutral axis. They are manufactured with aluminum housings and steel inner squares. They have standard Tensys 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Rubber Suspension Units DK-A, DK-S

DK-A				DK-S			Dimensions - Millimeters					
UPC #	Type	Dimensions - Millimeters		UPC #	Type	Dimensions - Millimeters	D	E	F	S	L	L1
		A	B			C						
				68514425095	DK-S 11x20	8	28	4	2.5	11	20	25
				68514425096	DK-S 11x30						30	35
				68514425097	DK-S 11x50						50	55
68514425080	DK-A 15x25	5	10	68514425098	DK-S 15x25	10	36	5	2.5	15	25	30
68514425081	DK-A 15x40			68514425099	DK-S 15x40						40	45
68514425082	DK-A 15x60			68514425100	DK-S 15x60						60	65
68514425083	DK-A 18x30	6	12	68514425101	DK-S 18x30	13	45	5	2.5	18	30	35
68514425084	DK-A 18x50			68514425102	DK-S 18x50						50	55
68514424855	DK-A 18x80			68514425103	DK-S 18x80						80	85
68514425086	DK-A 27x40	8	20	68514425104	DK-S 27x40	16	62	6	3.0	27	40	45
68514425087	DK-A 27x60			68514425105	DK-S 27x60						60	65
68514425088	DK-A 27x100			68514425106	DK-S 27x100						100	105
68514425089	DK-A 38x60	10	25	68514425107	DK-S 38x60	20	80	7	3.5	38	60	70
68514425090	DK-A 38x80			68514425108	DK-S 38x80						80	90
68514425091	DK-A 38x120			68514425109	DK-S 38x120						120	130
68514425092	DK-A 45x80	12	35	68514425110	DK-S 45x80	24	95	8	4.0	45	80	90
68514425093	DK-A 45x100			68514425111	DK-S 45x100						100	110
68514425094	DK-A 45x150			68514425112	DK-S 45x150						150	160
68514446319	DK-A 50x120	M12x40	40	68514446321	DK-S 50x120	30	108	8	4.0	50	120	130
68514446317	DK-A 50x200			68514446320	DK-S 50x200						200	210
68514446316	DK-A 50x300			68514446318	DK-S 50x300						300	310

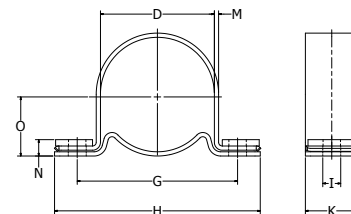
Note: ■ See pages 50 and 51 for additional product and performance data.

### RunRight™ BK Brackets

The RunRight BK Bracket is for positioning and securing all DK suspension units using the frictional force created between the double clamps. These steel clamps are supplied separately and do not include bolts. Lovejoy recommends using two or more clamps on the longer DK suspension units.

BK Brackets

UPC #	Type	Dimensions - Millimeters							
		D	G	H	I	K	M	N	O
68514425113	BK11	28	45	60	6.5	20	1.5	6	15.5
68514425114	BK15	36	55	75	6.5	25	2.0	7	20.0
68514425115	BK18	45	68	90	8.5	30	2.0	8	24.5
68514425116	BK27	62	92	125	10.5	35	2.5	10	33.5
68514425117	BK38	80	115	150	12.5	40	3.0	11	43.0
68514424451	BK45	95	130	165	12.5	45	4.0	14	51.5
68514446315	BK50	108	152	195	16.5	50	4.0	15	58.0



# Rubber Suspension Units

## DW-A 15 to 38, DW-C 15 to 38

**RunRight™**  
by **Lovejoy**

### RunRight™ Rubber Suspension Unit DW-A 15 to 38

The RunRight™ Rubber Suspension Unit DW-A has 4 bore holes in the inner square and the brackets are welded to the housing. They are designed to transmit alternating motions from the neutral position. A bolt through either two, or all four of the bore holes, can be used to mount a lever to either one or both sides of the unit. They are manufactured with cast iron or steel housings and aluminum inner squares, see chart below. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



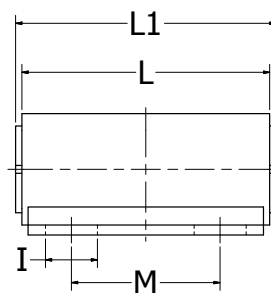
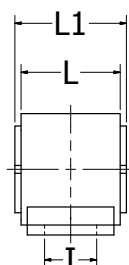
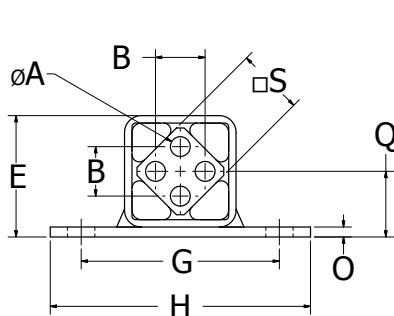
DW-A



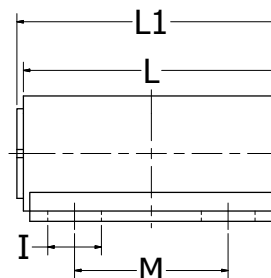
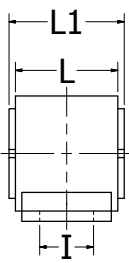
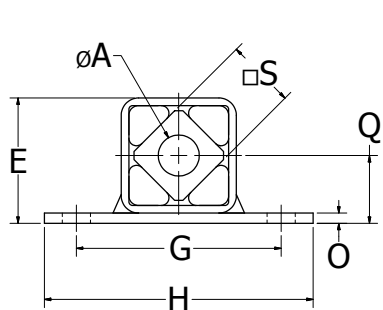
DW-C

### RunRight™ Rubber Suspension Unit DW-C 15 to 38

The RunRight Rubber Suspension Unit DW-C has one central bore, allowing a lever arm to be positioned between 0° and 360°, and the brackets are welded to the housing. The frictional force of this unit guarantees a secure connection of the lever arms in any position. They are manufactured with cast iron or steel housings and aluminum inner squares, see chart below. They have standard Tensys 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



DW-A



DW-C

Rubber Suspension Units DW-A, DW-C

DW-A				DW-C			Dimensions - Millimeters											Construction
UPC #	Type	Dimension-Millimeters		UPC #	Type	Dimension-Millimeters	E	G	H	I	O	Q	S	L	L1	M		
		A	B														A	
68514480069	DW-A 15x25	5	10	68514480081	DW-C 15x25	10	29.5	50	65	7 x 12	2.5	16.0	15	25	30	—	Steel	
68514480070	DW-A 15x40			68514480082	DW-C 15x40		28.0		66	7 x 22	3.0	14.0		40	45	—	Cast Iron	
68514480071	DW-A 15x60			68514480083	DW-C 15x60		29.5		65	7 x 12	2.5	16.0		60	65	40	Steel	
68514480072	DW-A 18x30	6	12	68514480084	DW-C 18x30	13	35.0	60	80	9 x 16.5	3.5	19.0	18	30	35	—	Steel	
68514480073	DW-A 18x50			68514480085	DW-C 18x50		34.0			9 x 30	4.0	17.0		50	55	—	Cast Iron	
68514480074	DW-A 18x80			68514480086	DW-C 18x80		35.0			9 x 16.5	3.5	19.0		80	85	50	Steel	
68514480075	DW-A 27x40	8	20	68514480087	DW-C 27x40	16	49.0	80	105	11 x 21	4.0	26.5	27	40	45	—	Steel	
68514480076	DW-A 27x60			68514480088	DW-C 27x60		48.0			11 x 31	5.0	24.5		60	65	—	Cast Iron	
68514480077	DW-A 27x100			68514480089	DW-C 27x100		49.0			11 x 21	4.0	26.5		100	105	60	Steel	
68514480078	DW-A 38x60	10	25	68514480090	DW-C 38x60	20	65.0	100	125	13 x 28	5.0	35.0	38	60	70	—	Steel	
68514480079	DW-A 38x80			68514480091	DW-C 38x80		64.0			13 x 25.4	6.0	32.0		80	90	40	Cast Iron	
68514480080	DW-A 38x120			68514480092	DW-C 38x120		65.0			13 x 28	5.0	35.0		120	130	80	Steel	

Note: ■ See pages 50 and 51 for additional product and data.

Note: ■ See pages 50 and 51 for additional product and performance data.

# Rubber Suspension Units

## DW-A 45 to 50, DW-A 60 to 100



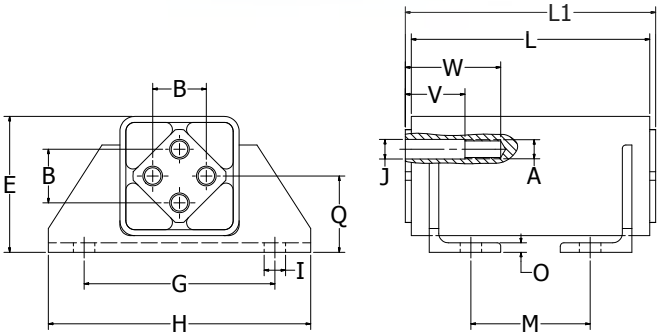
### RunRight™ Rubber Suspension Unit DW-A 45 to 50

The RunRight™ Rubber Suspension Unit DW-A has 4 bore holes in the inner square and the brackets are welded to the housing. They are designed for transmitting alternating motions from the neutral position. A bolt through either two, or all four of the bore holes, can be used to mount a lever to either one or both sides of the unit. They are manufactured with cast iron or steel housings and aluminum inner squares, see chart below. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



### RunRight™ Rubber Suspension Unit DW-A 60 to 100

The RunRight Rubber Suspension Unit DW-A has 4 bore holes in the inner square and the brackets are welded to the housing. They are designed for transmitting alternating motions from the neutral position. A bolt through either two, or all four of the bore holes, can be used to mount a lever to either one or both sides of the unit. They are manufactured with steel housings and inner squares. They have standard Tensys 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Rubber Suspension Units DW-A 45 to 50														
UPC #	Type	A	B	E	G	H	I	O	Q	S	L	L1	M	Construction
68514463923	DW-A 45x100	12	35	77	80	115	13 x 30.5	7	38	45	100	110	40	Cast Iron
68514463636	DW-A 50x120	M12X40	40	65	100	125	18 x 38	8	35	50	120	130	50	Cast Iron
68514484320	DW-A 50x160			64			18 x 30		32		160	170	70	Steel
68514463637	DW-A 50x200			65			18 x 30		35		200	210	70	Cast Iron

Rubber Suspension Units DW-A 60 to 100																	
UPC #	Type	A	B	E	G	H	I	J	O	Q	S	V	W	L	L1	M	Construction
68514484258	DW-A 60X150	M16	45	115	160	220	18	16.5	8	65	60	40	70	150	160	60	Steel
68514484259	DW-A 60X200											50	80	200	210	100	Steel
68514484260	DW-A 60X300											50	80	300	310	200	Steel
68514484261	DW-A 70X200	M20	50	140	200	260	22	20.5	9	80	70	50	90	200	210	100	Steel
68514484262	DW-A 70X300													300	310	200	Steel
68514484263	DW-A 70X400													400	410	300	Steel
68514484264	DW-A 80X200	M20	60	153	220	280	22	20.5	10	85	80	50	90	200	210	80	Steel
68514484265	DW-A 80X300													300	310	180	Steel
68514484266	DW-A 80X400													400	410	280	Steel
68514484267	DW-A 100X250	M24	75	195	300	380	26	25.0	12	110	100	50	100	250	260	110	Steel
68514484268	DW-A 100X400													400	410	260	Steel
68514484269	DW-A 100X500													500	510	360	Steel

Note: ■ See pages 50 and 51 for additional product and performance data.

RUBBER SUSPENSION

# Rubber Suspension Units

## DO-A 15 to 45, DO-A 50

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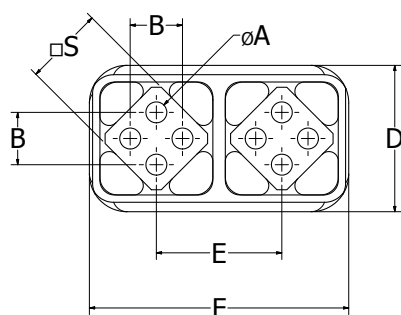
### RunRight™ Rubber Suspension Units DO-A 15 to 45

The RunRight™ Rubber Suspension Unit DO-A has 4 bore holes in each of the inner squares. They are designed for transmitting alternating motions from the neutral position. A bolt through either two, or all four of the bore holes, can be used to mount a lever to either one or both sides of the unit. They are manufactured with cast iron or steel weldment housings and aluminum inner squares, see chart below. They have standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.

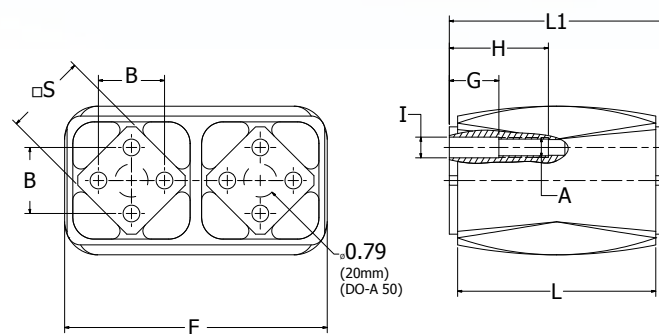


### RunRight™ Rubber Suspension Unit DO-A 50

The RunRight Rubber Suspension Unit DO-A 50 has 4 bore holes in each of the inner squares. They are designed for transmitting alternating motions from the neutral position. A bolt through either two, or all four of the bore holes, can be used to mount a lever to either one or both sides of the unit. They are manufactured with cast iron housings and aluminum inner squares. They have standard Tensys 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



DO-A 15 to 45



DO-A 50

### Rubber Suspension Units DO-A

UPC #	Type	A	B	D	E	F	S	G	H	L	L1	Construction
68514425119	DO-A 15X25	5	10	30	26	55	15	—	—	25	30	Cast Iron
68514425120	DO-A 15X40			27	27	54				40	45	Cast Iron
68514425121	DO-A 15X60									60	65	Steel Weldment
68514425122	DO-A 18X30	6	12	36	31	66	18	—	—	30	35	Cast Iron
68514425123	DO-A 18X50			37	32	64				50	55	Cast Iron
68514425124	DO-A 18X80									80	85	Steel Weldment
68514425125	DO-A 27X40	8	20	49	45	93	27	—	—	40	45	Cast Iron
68514425126	DO-A 27X60			51		90				60	65	Cast Iron
68514425127	DO-A 27X100									100	105	Steel Weldment
68514425128	DO-A 38X60	10	25	70	60	124	38	—	—	60	70	Cast Iron
68514425129	DO-A 38X80			66		120				80	90	Cast Iron
68514425130	DO-A 38X120									120	130	Steel Weldment
68514425131	DO-A 45X80	12	35	84	72	148	45	—	—	80	90	Cast Iron
68514425132	DO-A 45X100				75	150				100	110	Cast Iron
68514425133	DO-A 45X150									150	160	Steel Weldment
68514457671	DO-A 50x120	M12x40	40	90	78	164	50	30	60	120	130	Cast Iron
68514485643	DO-A 50x160							30	60	160	170	Cast Iron
68514457672	DO-A 50x200							40	70	200	210	Cast Iron

Note: ■ See pages 50 and 51 for additional product and performance data.



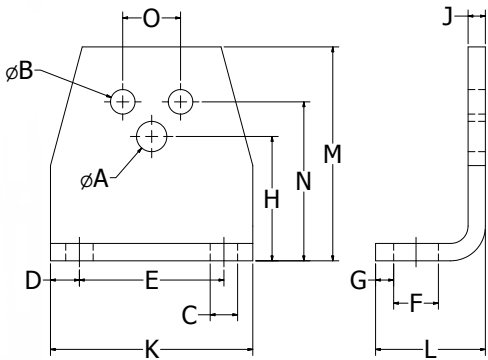
# Rubber Suspension Units

## Accessories - WS Brackets



### RunRight™ WS Brackets

The RunRight™ WS Bracket offers easy assembly to equipment for the DR-A, DK-A and DO-A Rubber Suspension Units by attaching to the bore holes of the inner squares. The base of the bracket can be positioned in either direction.



WS Brackets																	
UPC #	Type	Fit for SE Tensioners			Fit for DR-A, DK-A, and DW-A				Dimensions - Millimeters								
		SE Size	A	H	Element Size	B	N	O	C	D	E	F	G	J	K	L	M
68514425200	WS11-15	11	6.5	27	15	5.5	35	10	7.0	7.5	30	13.0	11.5	4	45	30	46
68514425201	WS15-18	15	8.5	34	18	6.5	44	12	7.0	7.5	40	13.0	13.5	5	55	32	58
68514425202	WS18-27	18	10.5	43	27	8.5	55	20	9.5	10.0	50	15.5	16.5	6	70	38	74
68514425203	WS27-38	27	12.5	57	38	10.5	75	25	11.5	12.5	65	21.5	21.0	8	90	52	98
68514425204	WS38-45	38	16.5	66	45	12.5	85	35	14.0	15.0	80	24.0	21.0	8	110	55	116
68514425205	WS45-50	45	20.5	80	50	12.5	110	40	18.0	20.0	100	30.0	26.0	10	140	66	140



Need help?  
Have questions?

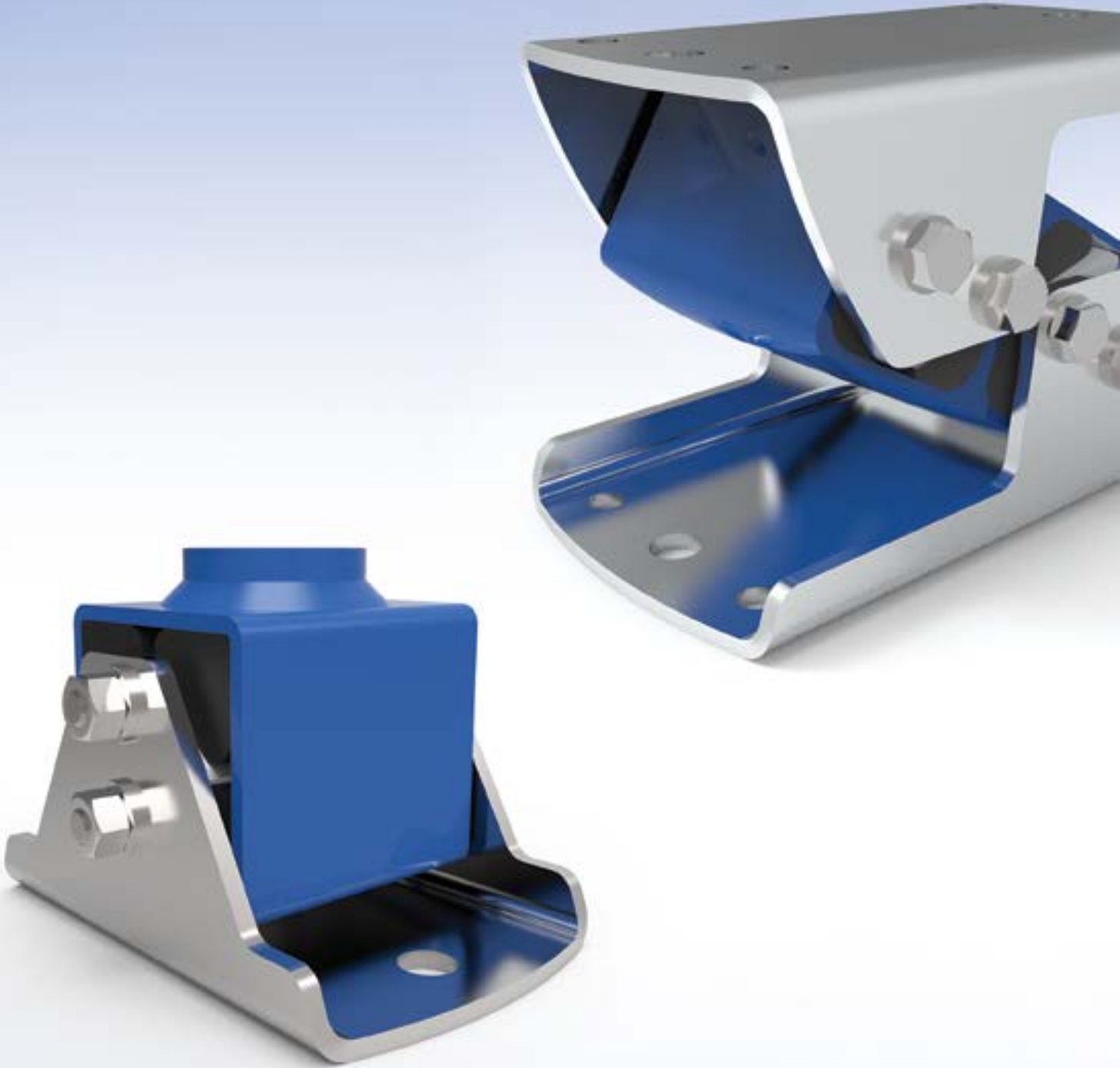
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Call Customer Service at  
630-852-0500

or visit us online at  
[www.lovejoy-inc.com](http://www.lovejoy-inc.com)

# RunRight<sup>TM</sup>

by **Lovejoy**



ANTI-VIBRATION

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# Anti-Vibration Mounts

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Anti-Vibration Mounts Model: V .....	66



## Safety Warning



When using Lovejoy products, you must follow these instructions and take the following precautions. Failure to do so may cause the power transmission product to break and parts to be thrown with sufficient force to cause severe injury or death.

Refer to this Lovejoy Catalog for proper selection, sizing, horsepower, torque range, and speed range of power transmission products, including elastomeric elements for couplings. Follow the installation instructions included with the product, and in the individual product catalogs for proper installation of power transmission products. Do not exceed catalog ratings.

Do not use any of these power transmission products for elevators, man lifts, or other devices that carry people. If the

power transmission product fails, the lift device could fall resulting in severe injury or death.

For all power transmission products, you must install suitable guards in accordance with OSHA and American Society of Mechanical Engineers Standards. Do not start power transmission product before suitable guards are in place. Failure to properly guard these products may result in severe injury or death from personnel contacting moving parts or from parts being thrown from assembly in the event the power transmission product fails.

If you have any questions, contact the Lovejoy Engineering Department at 1-630-852-0500.

# Anti-Vibration Mounts

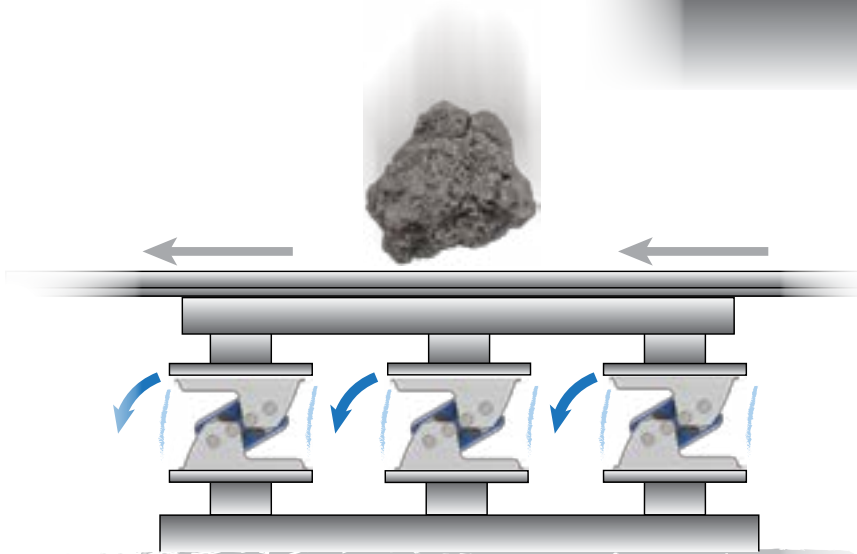
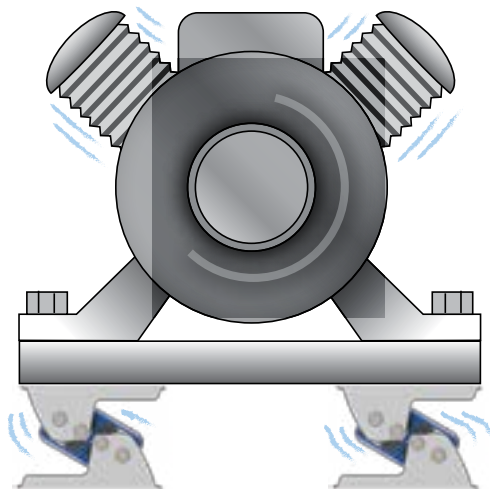
## Usage Illustrations



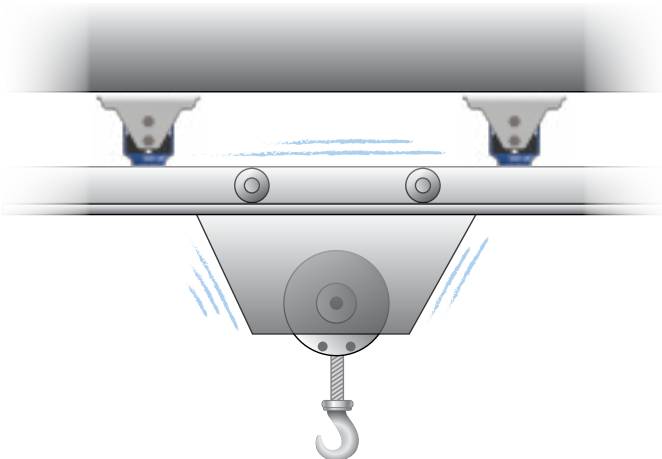
Designed for vibration-suppression type applications with high sinusoidal frequencies.



ESL



Shock absorption for impact beds provides protection of conveyor belts.



Highly elastic suspension units absorb active or passive vibrations, and provide solid-born noise insulation.





V

ANTI-VIBRATION

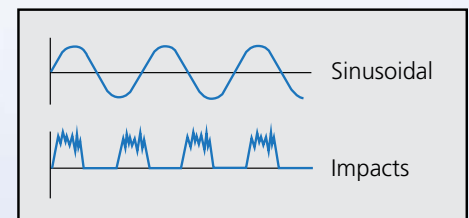


# Anti-Vibration Mounts Selection Guide

RunRight™ Model	Type	Page #	Description
	ESL	64	ESL Anti-Vibration Mounts are used to absorb tensile, pressure and shear loads. Normally horizontally mounted (on floor), they are also ideal for wall and ceiling installations. Available in 8 sizes with a load range of 45 to 4,271 lbs per mount. Their natural frequency is between 3.5 and 8 Hz. The ESL mounts are used for machine installations where the machine frequency > ESL natural frequency.
	V	66	ESL Anti-Vibration Mounts are used to absorb tensile, pressure and shear loads. Normally horizontally mounted (on floor), they are also ideal for wall and ceiling installations. Available in 6 sizes with a load range of 67 to 2,700 lbs per mount. Their natural frequency is between 10 and 30 Hz. The Type V mounts are used for machine installations where the machine frequency < Type V natural frequency.

## Anti-Vibration Technology

Manufacturers of anti-vibration mounts usually offer machine mounts with varying natural frequencies, to eliminate the excitation frequency of the machine, versus the natural frequency of the anti-vibration mount. Vibration technology differentiates between two types of oscillation signatures. Sinusoidal oscillation of working equipment produces a predictable vibration signature. Sinusoidal oscillations occur on generators, compressors and blowers, which require a soft ESL mount, whereas, shocks or impacts produce a non-predictable signature. For mixers, crushers, punching presses and shears, a V mount would be preferred.



Dampening effect is related to the proportion of the relevant acoustic resistance to acoustic velocity, and the material density. Typically, the ideal amount of isolation of solid-born noise can be expected through the entire frequency range with a rubber-steel mount combination. Isolation in relationship to steel is shown in the chart to the right.

## Isolation Properties

Active isolation prevents the direct transfer of a machine's vibrations into the substructure, frame and building. In order to select anti-vibration mounts, the machine structure stiffness, center of gravity, interfering frequency, and machine location need to be known.

Passive isolation installs a protective barrier between the shocks and vibrations that occur in a factory when sensitive instruments, laboratory equipment, or electronic controls are involved. Sensitive equipment needs to be protected by installing them on soft anti-vibration mounts (ESL) that will absorb the environmental impacts.

Rubber Compounds	Torque & Load Factor*	Operating Temperature F° (C°)	Rubber Type	Rubber Characteristics
Tensys™ 10	1.0	-40° to 180° (-40° to 80°)	Natural	Standard
Tensys™ 20	approximately 1.0	-22° to 195° (-30° to 90°)	Neoprene	Oil Resistant
Tensys™ 30	approximately 1.0	-40° to 180° (-40° to 80°)	Natural	High-Dampening (motorbases only)
Tensys™ 40	approximately 0.6	180° to 250° (80° to 120°)	EPDM	High Temperature Resistant
Tensys™ 50	approximately 3.0	-31° to 195° (-35° to 90°)	Urethane	High Torque

Note: ■ \*Factor in relation to torque & loads shown on standard selection charts.

Acoustic Isolation (vs. Steel)	
Steel:	1:1
Bronze:	1:1.3
Cork:	1:400
Rubber:	1:800
Air:	1:90,000

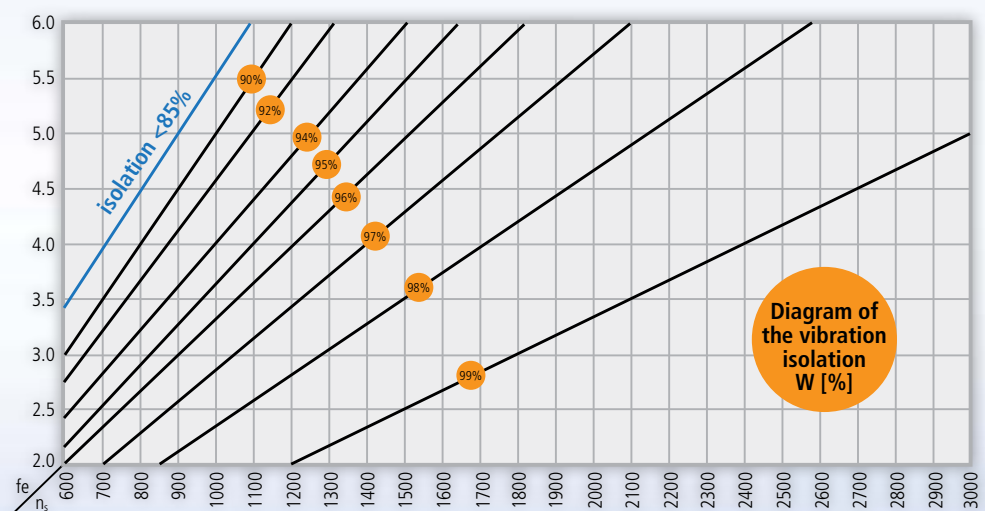


Diagram of the vibration isolation W [%]

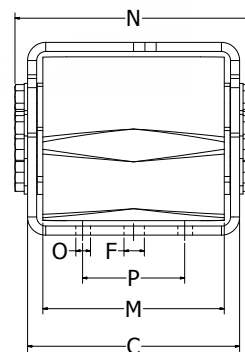
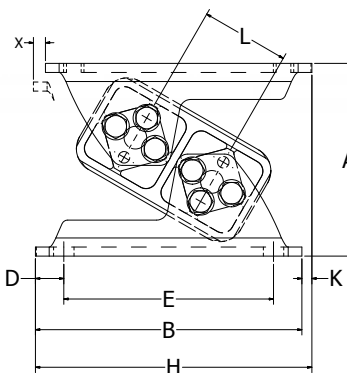
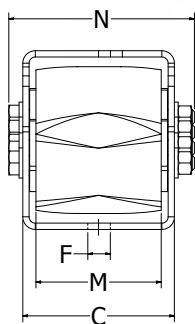
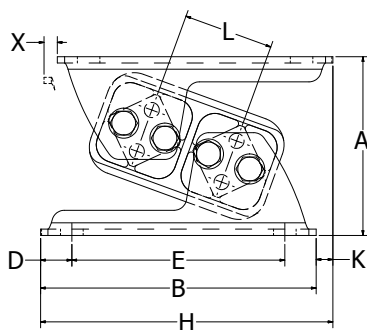
# Anti-Vibration Mounts

## ESL

**RunRight™**  
by **Lovejoy**

### RunRight™ Anti-Vibration Mounts Type ESL

RunRight™ ESL Anti-Vibration mounts are designed for applications requiring the absorption of low and medium frequency vibrations. They are used to absorb tensile, pressure and shear loads. Typically mounted horizontally on the floor, they can also be used for wall and ceiling applications. The ESL are manufactured with cast iron housings, aluminum inner squares and have steel brackets. They are manufactured with standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Anti-Vibration Mounts Type ESL															
UPC #	Type	G Load Range lbs (N)	Dimensions - Inches (mm)												
			A		B	C	D	E	F	H	J	K	L	M	N
			UNLOADED	MAX LOAD											
68514425214	ESL15	45 to 123 (200 to 550)	2.12 (54)	1.69 (43)	3.34 (85)	1.92 (49)	0.39 (10)	2.55 (65)	0.27 (7)	3.58 (91)	0.07 (2)	0.21 (5.5)	1.00 (25.5)	1.57 (40)	2.30 (58.5)
68514425215	ESL18	100 to 280 (450 to 1,250)	2.55 (65)	2.00 (51)	4.13 (105)	2.36 (60)	0.49 (12.5)	3.14 (80)	0.37 (9.5)	4.37 (111)	0.09 (2.5)	0.21 (5.5)	1.22 (31)	1.96 (50)	2.71 (69)
68514425216	ESL27	157 to 449 (700 to 2,000)	3.46 (88)	2.67 (68)	5.51 (140)	2.79 (71)	0.59 (15)	4.33 (110)	0.45 (11.5)	5.82 (148)	0.11 (3)	0.31 (8)	1.73 (44)	2.36 (60)	3.35 (85.3)
68514425217	ESL38	292 to 854 (1,300 to 3,800)	4.60 (117)	3.58 (91)	6.88 (175)	3.85 (98)	0.68 (17.5)	5.51 (140)	0.55 (14)	7.16 (182)	0.15 (4)	0.27 (7)	2.36 (60)	3.14 (80)	4.60 (117)
68514425218	ESL45	494 to 1,350 (2,200 to 6,000)	5.62 (143)	4.33 (110)	8.66 (220)	4.72 (120)	0.98 (25)	6.69 (170)	0.70 (18)	9.25 (235)	0.19 (5)	0.51 (13)	2.87 (73)	3.93 (100)	5.43 (138)
68514425219	ESL50	899 to 2,472 (4,000 to 11,000)	6.69 (170)	5.43 (138)	9.25 (235)	5.59 (142)	0.98 (25)	7.28 (185)	0.70 (18)	9.60 (244)	0.23 (6)	0.35 (9)	3.07 (78)	4.72 (120)	6.37 (162)
68514483847	ESL50-1.6	1,236 to 3,372 (5,500 to 15,000)	6.69 (170)	5.43 (138)	9.25 (235)	7.32 (186)	0.98 (25)	7.28 (185)	0.70 (18)	9.60 (244)	0.31 (8)	0.35 (9)	3.07 (78)	6.29 (160)	8.11 (206)
68514483848	ESL50-2.0	1,573 to 4,271 (7,000 to 19,000)	6.69 (170)	5.43 (138)	9.25 (235)	8.89 (226)	0.98 (25)	7.28 (185)	0.70 (18)	9.60 (244)	0.31 (8)	0.35 (9)	3.07 (78)	7.87 (200)	9.68 (246)

Notes: ■ The ESL Mounts shown shaded in gray may be "Mixed & Matched" as required to achieve proper loading.  
 ■ The maximum load applied to the x-axis cannot exceed 200% of the z-axis capacity. ■ The maximum load applied to the y-axis cannot exceed 20% of the z-axis capacity.  
 ■ See page 63 for additional product and performance data.

# Anti-Vibration Mounts

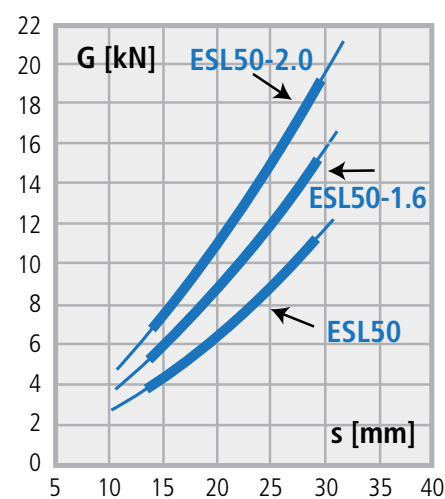
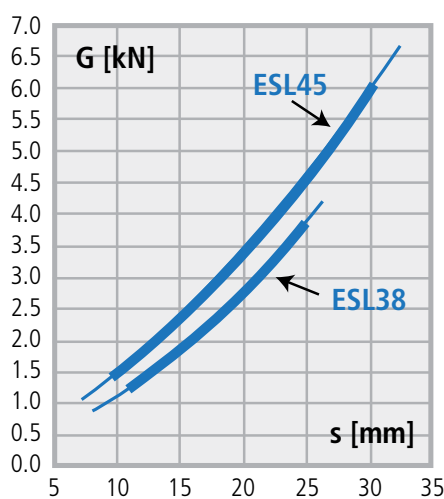
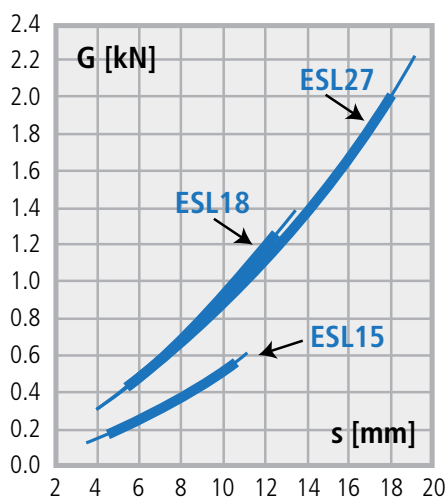
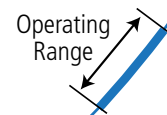
## ESL continued

Anti-Vibration Mounts Type ESL, continued						
UPC #	Type	Natural Frequency G Min to G Max (Hz)	O inch (mm)	P inch (mm)	X Max inch (mm)	Materials (Zinc Plated Hardware)
68514425214	ESL15	8.2 - 5.8	—	—	0.06 (1.5)	Aluminum Inner Profiles Cast Iron Housings Steel Brackets Painted Safety Blue
68514425215	ESL18	7.5 - 5.0	—	—	0.075 (1.9)	
68514425216	ESL27	6.2 - 4.5	—	—	0.11 (2.7)	
68514425217	ESL38	5.5 - 4.0	—	—	0.14 (3.6)	
68514425218	ESL45	5.0 - 3.5	—	—	1.73 (4.4)	
68514425219	ESL50	5.0 - 3.5	0.53 (13.5)	3.54 (90)	0.39 (10)	Aluminum Inner Profiles Cast Iron Housings Steel Brackets Painted Safety Blue
68514483847	ESL50-1.6	5.0 - 3.5	0.53 (13.5)	3.54 (90)	0.39 (10)	
68514483848	ESL50-2.0	5.0 - 3.5	0.53 (13.5)	3.54 (90)	0.39 (10)	

Note: ■ The ESL Mounts shown shaded in gray boxes may be "Mixed & Matched" as required to achieve proper loading.

### Cold Flow and Deflection Curves

The deflection values shown below indicate the initial cold flow that occurs within a few hours of operation. Final cold flow that occurs after one year is usually the initial deflection value multiplied by 1.09. The deflection values shown in the charts below are not recommended for unit testing. Please see pages 4 through 7 in this catalog for additional information.



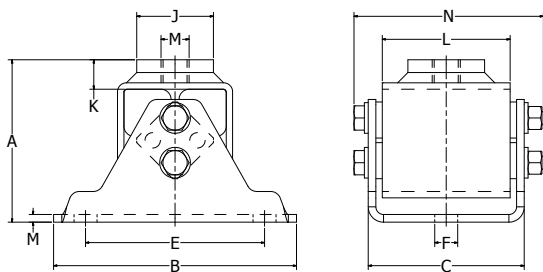
# Anti-Vibration Mounts

## Type V

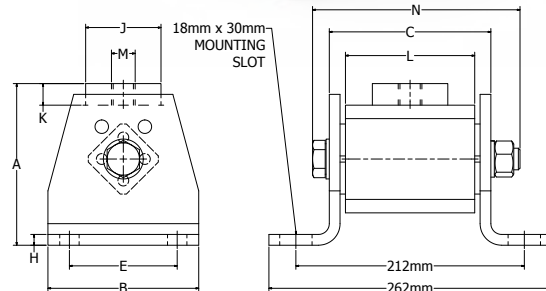


### RunRight™ Anti-Vibration Mounts Type V

RunRight™ V Anti-Vibration mounts are designed for multi-directional applications requiring the absorption of tensile, pressure and shear loads. Typically mounted horizontally on the floor, they can also be used for wall and ceiling applications. They are manufactured with aluminum housings and inner squares and have steel brackets. They are manufactured with standard Tensys™ 10 rubber inserts and can be used for applications operating within a -40° to 180°F (-40° to 80°C) temperature range.



Type V15 to V45



Type V50

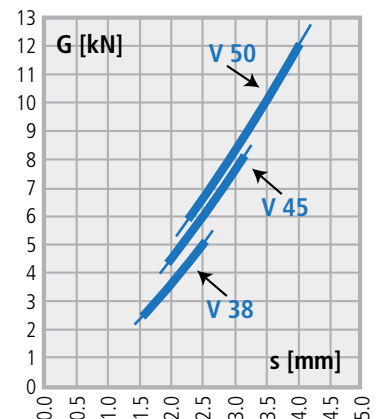
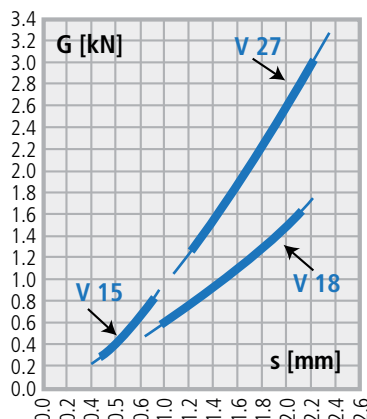
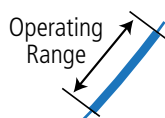
Anti-Vibration Mounts Type V													
UPC #	Type	G Load Range lbs (N)	Dimensions - Inches (mm)										
			A	B	C	E	F	H	J	K	L	M	N
68514453373	V15	67 to 180 (300 to 800)	1.93 (49)	3.15 (80)	2.01 (51)	2.17 (55)	0.37 (9.5)	0.11 (3)	0.79 (20)	0.39 (10)	1.57 (40)	M10	2.32 (59)
68514457653	V18	135 to 360 (600 to 1,600)	2.6 (66)	3.94 (100)	2.44 (62)	2.95 (75)	0.37 (9.5)	0.14 (3.5)	1.18 (30)	0.51 (13)	1.96 (50)	M10	2.91 (74)
68514457654	V27	292 to 670 (1,300 to 3,000)	3.31 (84)	5.12 (130)	2.87 (73)	3.94 (100)	0.45 (11.5)	0.15 (4)	1.57 (40)	0.57 (14.5)	2.36 (60)	M12	3.35 (85)
68514457655	V38	585 to 1,125 (2,600 to 5,000)	4.13 (105)	6.10 (155)	3.94 (100)	4.72 (120)	0.55 (14)	0.19 (5)	1.77 (45)	0.69 (17.5)	3.14 (80)	M16	4.61 (117)
68514457656	V45	1,000 to 1,800 (4,500 to 8,000)	5.00 (127)	7.48 (190)	4.80 (122)	5.51 (140)	0.70 (18)	0.23 (6)	2.36 (60)	0.87 (22.5)	3.94 (100)	M20	5.63 (143)
68514463661	V50	1,350 to 2,700 (6,000 to 12,000)	5.91 (150)	5.51 (140)	5.91 (150)	3.94 (100)	—	0.39 (10)	2.76 (70)	0.98 (25)	4.72 (120)	M20	7.60 (193)

UPC #	Type	Natural Frequency G Min to G Max (Hz)	Materials (Zinc Plated Hardware)
68514453373	V15	30 - 23	Aluminum Inner Square  Steel Brackets  Painted Safety Blue
68514457653	V18	25 - 15	
68514457654	V27	28 - 20	
68514457655	V38	14 - 12	
68514457656	V45	15 - 12	
68514463661	V50	12 - 10	

Notes: ■ The maximum load applied to the y-axis, cannot exceed 20% of the x-axis and z-axis capacity.  
■ Momentary shock loads of 2.5 g may be applied to the x-axis and z-axis.

### Cold Flow and Deflection Curves

The deflection values shown at right indicate the initial cold flow that occurs within a few hours of operation. Final cold flow that occurs after one year is usually the initial deflection value multiplied by 1.09. The deflection values shown in the charts are not recommended for unit testing. Please see pages 4 through 7 in this catalog for additional information.





## Lovejoy Product Warranty

Lovejoy, Inc. warrants all products it manufactures to be free from defects in material and workmanship at the time of delivery to the purchaser. Defective products may be returned to Lovejoy after inspection by the purchaser and upon receipt from Lovejoy of shipping instructions specific to the defective products authorized by Lovejoy to be returned. Products returned in accordance with the foregoing procedure will be replaced or repaired, at the option of Lovejoy, without charge and returned to the purchaser F.O.B. Downers Grove, Illinois or South Haven, Michigan, depending upon origin of manufacture. In all cases, transportation costs and charges for returned products shall be paid by the purchaser and Lovejoy hereby disclaims all responsibility for any and all such transportation costs and charges.

This warranty is subject to the following LIMITATIONS:

The purchaser's exclusive remedy under this warranty is limited to the repair or replacement of defective products supplied by Lovejoy, as set forth above. LOVEJOY IS NOT RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE BREACH OF THIS OR ANY OTHER EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE PRODUCTS, WHETHER ARISING IN TORT OR BY CONTRACT. LOVEJOY FURTHER DISCLAIMS ALL LIABILITY FROM PERSONAL INJURY RELATING TO ITS PRODUCTS TO THE EXTENT PERMITTED BY LAW. BY ACCEPTANCE OF ANY OF LOVEJOY'S PRODUCTS, THE PURCHASER ASSUMES ALL LIABILITY FOR THE CONSEQUENCES ARISING FROM THEIR USE OR MISUSE.

This express warranty is the only warranty applicable to this transaction. IT EXCLUDES ALL OTHER EXPRESS ORAL OR WRITTEN WARRANTIES AND ALL WARRANTIES IMPLIED BY LAW WITH RESPECT TO THE PRODUCTS, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Every claim under this warranty shall be deemed waived by the purchaser unless made in writing within one (1) year of the receipt of the products to which such claim relates. This warranty is void in the event that repairs are made by anyone other than Lovejoy without prior authorization from Lovejoy. No person, firm or corporation is authorized to assume for Lovejoy any other liability in connection with the sale of its products. No person, firm or corporation is authorized to modify or waive the terms of this Warranty unless done in writing and signed by a duly authorized agent of Lovejoy.

Note: Specifications are subject to change without notice, and without liability therefor.





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