

SureMotion® Linear Guides

LU Series

Overview

Tough, forgiving and CLEAN Linear Motion!

The the crowned or double-V wheel shape feature, along with NO lubrication requirement, makes this product ideal for applications where there is process debris but no foreign mechanism oils are allowed. The Guide Tracks and Carriages come in two styles (LUC & LUV) and are intended to work in tandem with each other for better forgiveness when used in unaligned frames and components. See the full list of engineered features below.

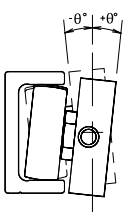
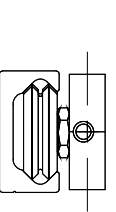
Features

Carriages

- Available in three sizes that match Guide Track sizes
- Available with two wheel shapes: Crown (C) or Double-V (V)
- Available with three, four, or five wheels
- All carriages have one or two adjustable eccentric wheel(s)
- All have felt wiper ends
- Carriage Plate Material: Aluminum with anodize finish
- Wheel Bearings: Single row ball, shielded
- Wheel Bearing Grease: Kluberplex BEM034-132
- Wheel Hub Material: 440C stainless steel
- Wheel Tread: Polymer, over-molded
- Rated Speed: 1 m/s

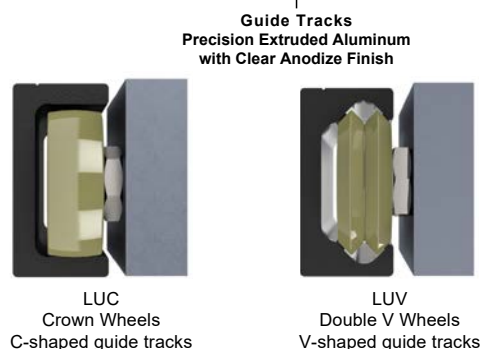
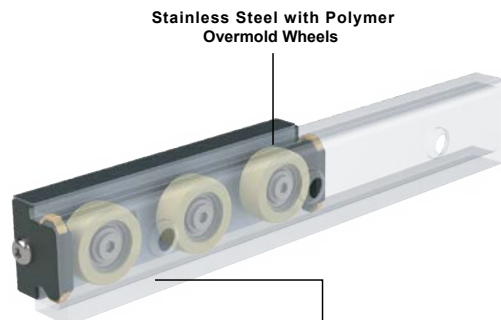
Applications

- Food processing
- Paper processing
- Fabric processing
- Clean room processes

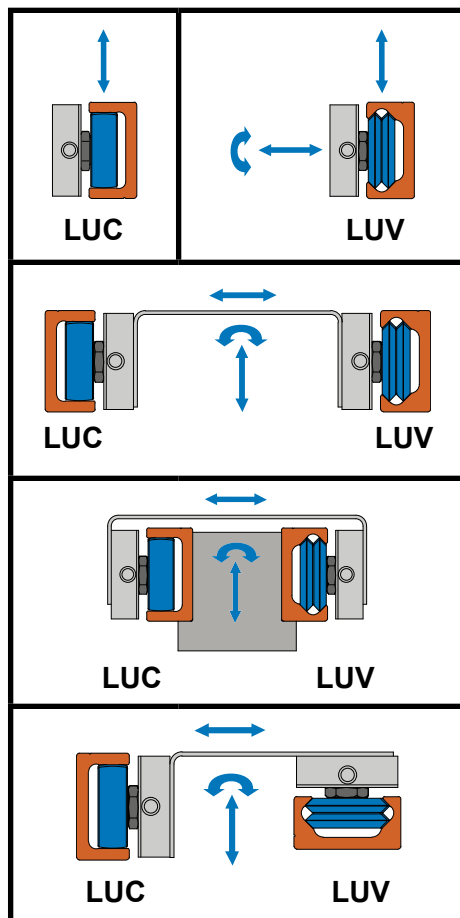
Range of Angular Misalignment		
	LUC	LUV
Series Size		
0	±3°	0°
1	±4°	
2	±6°	

Guide Tracks

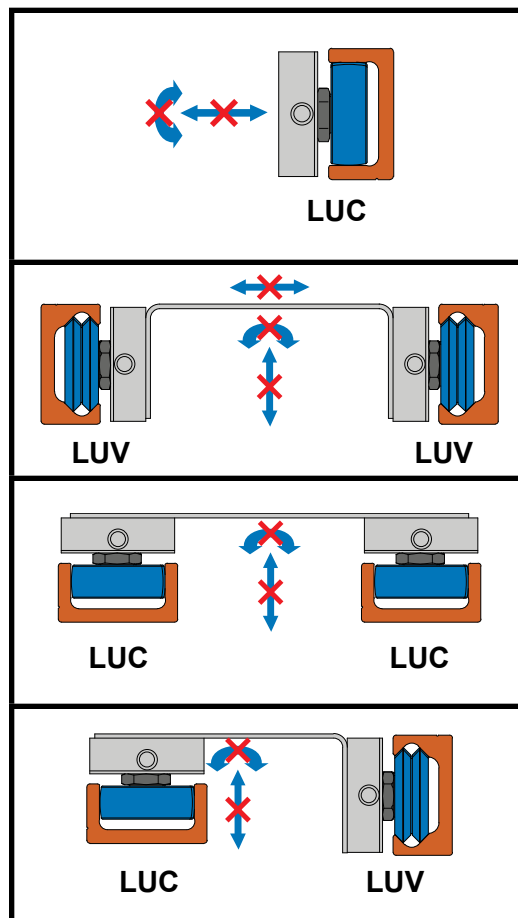
- Available in three sizes that match carriage sizes
- Available in two cross-sectional shapes C or V
- Lengths up to 1520mm
- Can be butted end-to-end for longer travel
- Material: Aluminum with anodized finish



Recommended Applied Load Directions



Not Recommended Applied Load Directions



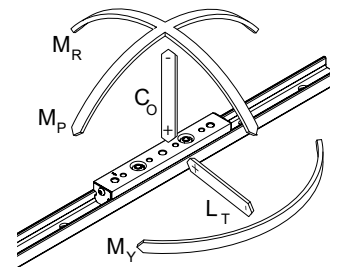
SureMotion® Linear Guides

LUC Series (Crown Wheel)

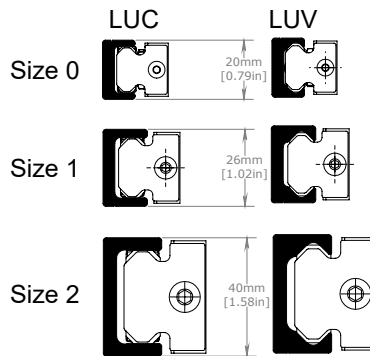
**LUC-0-3W****LUC-0-4W****LUC-0-5W**

LUC Series Crown Carriage

Part Number	Price	Size	Wheel Count	Static (Co)	Lateral (Lt)	Pitch Moment (Mp)	Yaw Moment (My)	Roll Moment (Mr)	Required Adjustment Tool	Price	Drawing Link
LUC-0-3W	\$145.00	0	3	0 N	53 N	0 N·m	0.6 N·m	0 N·m	LUACC-0	\$25.00	PDF
LUC-0-4W	\$218.00		4		53 N		1.8 N·m				PDF
LUC-0-5W	\$236.00		5		63 N		1.8 N·m				PDF
LUC-1-3W	\$154.00	1	3	0 N	107 N	0 N·m	2 N·m	0 N·m	LUACC-1	\$30.00	PDF
LUC-1-4W	\$218.00		4		107 N		5.1 N·m				PDF
LUC-1-5W	\$245.00		5		127 N		5.1 N·m				PDF
LUC-2-3W	\$166.00	2	3	0 N	142 N	0 N·m	3.2 N·m	0 N·m	LUACC-2	\$32.00	PDF
LUC-2-4W	\$252.00		4		142 N		9.3 N·m				PDF
LUC-2-5W	\$271.00		5		169 N		9.3 N·m				PDF


LUC-1-480 Track
LUC-1-4W Carriage

LU Series relative sizes



LUC Series Guide Track

Part Number	Price	Size	Length (mm [in])	Drawing Links
LUC-0-480	\$22.00	0	480 [18.9]	PDF
LUC-0-640	\$29.00		640 [25.2]	PDF
LUC-0-800	\$37.00		800 [31.5]	PDF
LUC-0-960	\$44.00		960 [37.8]	PDF
LUC-0-1120	\$51.00		1120 [44.1]	PDF
LUC-0-1280	\$59.00		1280 [50.4]	PDF
LUC-0-1520	\$70.00	1	1520 [59.8]	PDF
LUC-1-480	\$24.00		480 [18.9]	PDF
LUC-1-640	\$32.00		640 [25.2]	PDF
LUC-1-800	\$40.00		800 [31.5]	PDF
LUC-1-960	\$48.00		960 [37.8]	PDF
LUC-1-1120	\$56.00		1120 [44.1]	PDF
LUC-1-1280	\$64.00	2	1280 [50.4]	PDF
LUC-1-1520	\$76.00		1520 [59.8]	PDF
LUC-2-480	\$35.00		480 [18.9]	PDF
LUC-2-640	\$47.00		640 [25.2]	PDF
LUC-2-800	\$59.00		800 [31.5]	PDF
LUC-2-960	\$70.00		960 [37.8]	PDF
LUC-2-1120	\$82.00	2	1120 [44.1]	PDF
LUC-2-1280	\$94.00		1280 [50.4]	PDF
LUC-2-1520	\$111.00		1520 [59.8]	PDF

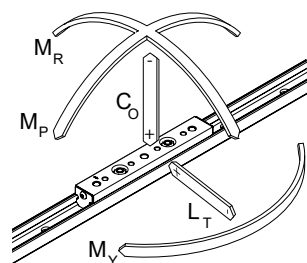
SureMotion® Linear Guides

LUV Series (Double V Wheel)

**LUV-0-3W****LUV-0-4W****LUV-0-5W**

LUV Series V-Carriage

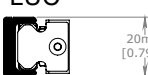
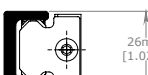
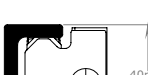
Part Number	Price	Size	Wheel Count	Static (Co)	Lateral (Lt)	Pitch Moment (Mp)	Yaw Moment (My)	Roll Moment (Mr)	Required Adjustment Tool	Price	Drawing Link
<u>LUV-0-3W</u>	\$127.00	0	3	38 N	53 N	0.6 N·m	0.6 N·m	0.2 N·m	<u>LUACC-0</u>	\$25.00	<u>PDF</u>
<u>LUV-0-4W</u>	\$200.00		4	46 N	53 N	21.1 N·m	1.8 N·m	0.4 N·m			<u>PDF</u>
<u>LUV-0-5W</u>	\$227.00		5	54 N	63 N	21.1 N·m	1.8 N·m	0.4 N·m			<u>PDF</u>
<u>LUV-1-3W</u>	\$136.00	1	3	76 N	107 N	2 N·m	2 N·m	0.5 N·m	<u>LUACC-1</u>	\$30.00	<u>PDF</u>
<u>LUV-1-4W</u>	\$209.00		4	91 N	107 N	61.5 N·m	5.1 N·m	1 N·m			<u>PDF</u>
<u>LUV-1-5W</u>	\$227.00		5	107 N	127 N	61.5 N·m	5.1 N·m	1 N·m			<u>PDF</u>
<u>LUV-2-3W</u>	\$164.00	2	3	94 N	142 N	3.6 N·m	3.2 N·m	1.2 N·m	<u>LUACC-2</u>	\$32.00	<u>PDF</u>
<u>LUV-2-4W</u>	\$218.00		4	116 N	142 N	124.9 N·m	9.3 N·m	2.3 N·m			<u>PDF</u>
<u>LUV-2-5W</u>	\$245.00		5	133 N	169 N	124.9 N·m	9.3 N·m	2.3 N·m			<u>PDF</u>



LU Series relative sizes



LUV-1-480 Track
LUV-1-4W Carriage

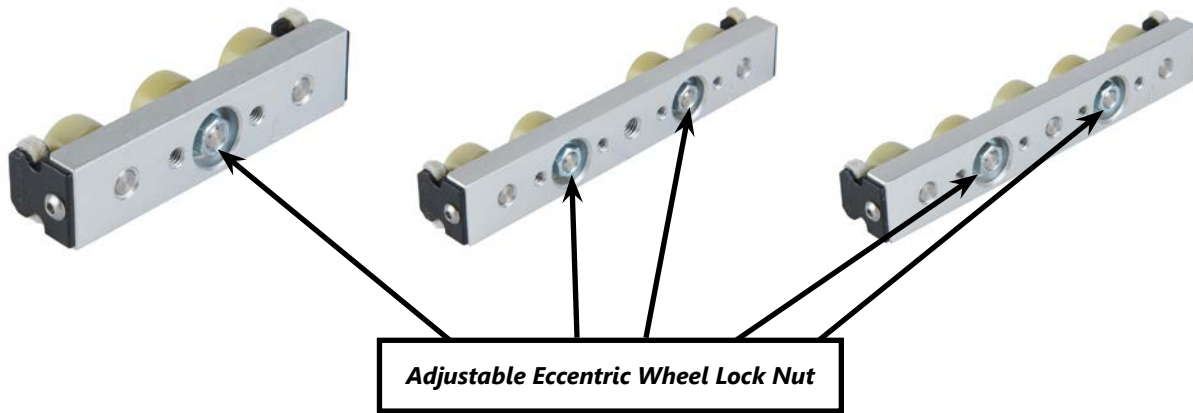
	LUC	LUV
Size 0		
Size 1		
Size 2		

LUV Series Guide Track

Part Number	Price	Size	Length (mm [in])	Drawing Links
<u>LUV-0-480</u>	\$22.00	0	480 [18.9]	<u>PDF</u>
<u>LUV-0-640</u>	\$29.00		640 [25.2]	<u>PDF</u>
<u>LUV-0-800</u>	\$37.00		800 [31.5]	<u>PDF</u>
<u>LUV-0-960</u>	\$44.00		960 [37.8]	<u>PDF</u>
<u>LUV-0-1120</u>	\$51.00		1120 [44.1]	<u>PDF</u>
<u>LUV-0-1280</u>	\$59.00		1280 [50.4]	<u>PDF</u>
<u>LUV-0-1520</u>	\$70.00		1520 [59.8]	<u>PDF</u>
<u>LUV-1-480</u>	\$24.00	1	480 [18.9]	<u>PDF</u>
<u>LUV-1-640</u>	\$32.00		640 [25.2]	<u>PDF</u>
<u>LUV-1-800</u>	\$40.00		800 [31.5]	<u>PDF</u>
<u>LUV-1-960</u>	\$48.00		960 [37.8]	<u>PDF</u>
<u>LUV-1-1120</u>	\$56.00		1120 [44.1]	<u>PDF</u>
<u>LUV-1-1280</u>	\$64.00		1280 [50.4]	<u>PDF</u>
<u>LUV-1-1520</u>	\$76.00		1520 [59.8]	<u>PDF</u>
<u>LUV-2-480</u>	\$35.00	2	480 [18.9]	<u>PDF</u>
<u>LUV-2-640</u>	\$47.00		640 [25.2]	<u>PDF</u>
<u>LUV-2-800</u>	\$59.00		800 [31.5]	<u>PDF</u>
<u>LUV-2-960</u>	\$70.00		960 [37.8]	<u>PDF</u>
<u>LUV-2-1120</u>	\$82.00		1120 [44.1]	<u>PDF</u>
<u>LUV-2-1280</u>	\$94.00		1280 [50.4]	<u>PDF</u>
<u>LUV-2-1520</u>	\$111.00		1520 [59.8]	<u>PDF</u>

SureMotion® Linear Guides LUC and LUV Series

Preloading and Adjustment

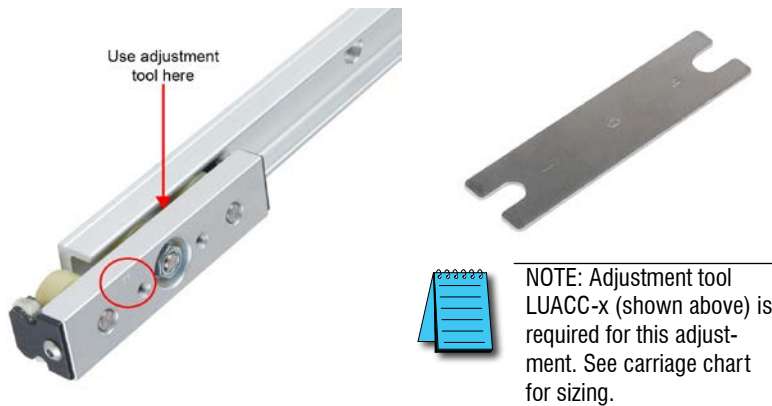


Step 1

Using a socket wrench, loosen the adjustable eccentric wheel lock nut counterclockwise

Step 2

Install the carriage into the guide track with the embossed arrow pointing in the same direction as the primary load. Using the adjusting tool, slowly turn the eccentric cam nut clockwise until a slight resistance is felt. This indicates wheel contact with the track.



Step 3

Using the adjustment tool to hold the eccentric cam nut in place, use the socket wrench to slight tighten the adjustable eccentric wheel lock nut (clockwise).

Step 4

Manually move the carriage along the entire length of the guide track to determine whether there are any noticeable resistance variations. If so, repeat 1-3

Step 5

Using the adjustment tool to hold the eccentric cam nut in place, use the socket wrench to fully tighten the adjustable eccentric wheel lock nut (clockwise).