



igus XYZ Gantries Overview

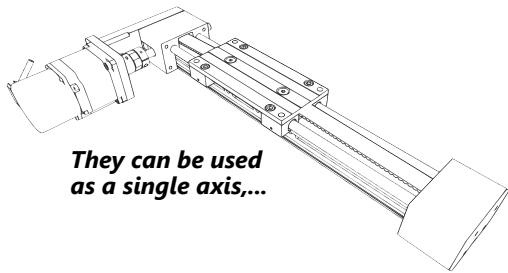
Features:

- Maintenance and Lubrication free
- Base/Rail material: 6061-T6 Aluminum with hard anodize finish
- Carriage Block Bushing Material: Drylin® iglide®-J
- Drive Type: Belt Drive or Lead Screw
- Adjustable Carriage Block Clearance
- Stackable and easy to assemble
- T-slots enable limit switches to be positioned anywhere
- Up to 1,000 mm Stroke
- Motor mounts for SureServo servo motors and SureStep stepper motors

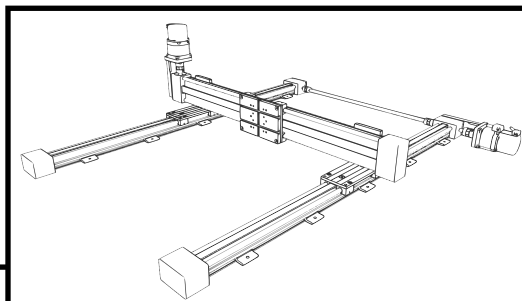


Configurations

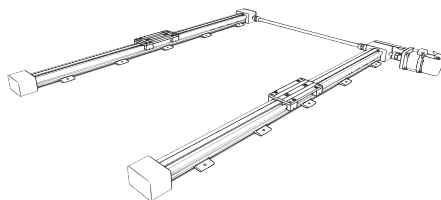
igus linear actuators can be mounted in any orientation. However, overhead provides the best protection against contamination.



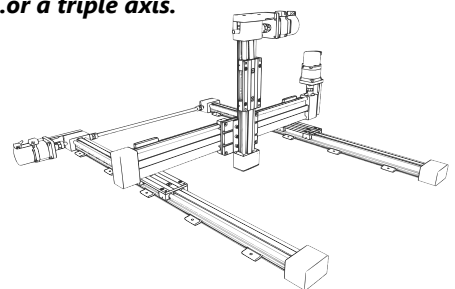
***They can be used
as a single axis,...***



...a double axis,...



...or a triple axis.

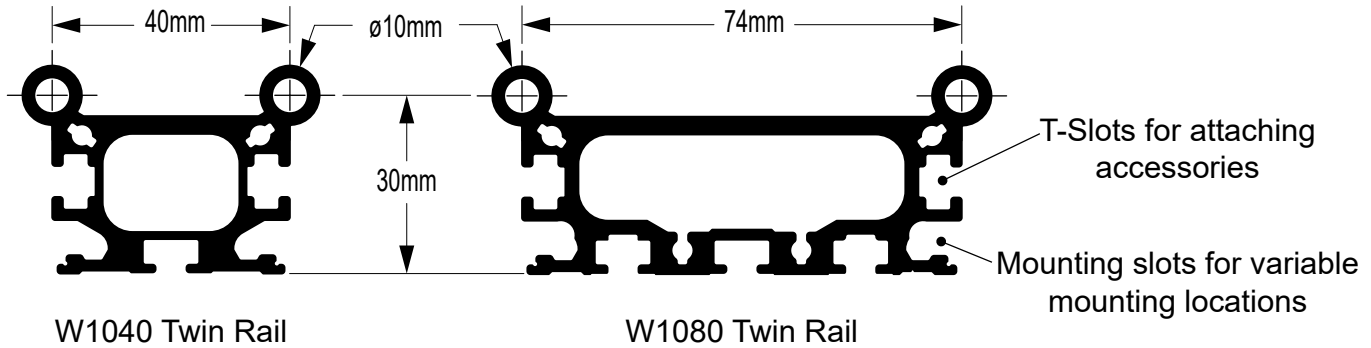




igus XYZ Gantries Overview

Rail Sizes

igus linear actuators are available in 2 rail sizes: W1040 and W1080.



Drive Types

igus linear actuators are available in 2 drive types: ZLW (Belt Driven) and SAW (Lead Screw Driven).



ZLW1040S-2
(Belt Driven)

ZLW1040 & ZLW1080

- Belt Drive
- Max Linear Speed: 1.5 m/s [4.92 ft/s]
- Max Stroke: 1000mm
- Available Accessories
 - Servo Motor Brackets
 - Stepper Motor Brackets
 - XY Plate
 - YZ Plate
 - Dual X connecting Drive Shaft
 - Sensor Bracket
 - Replacement Carriage Block Liners



SAW1040-2-B
(Lead Screw Driven)

SAW1040 & SAW1080

- Lead Screw Drive
- Max Linear Speed: 0.15 m/s [0.49 ft/s]
- Max Stroke: 750mm
- Available Accessories
 - Servo Motor Brackets
 - Stepper Motor Brackets
 - XY Plate
 - YZ Plate
 - Sensor Bracket
 - Replacement Carriage Block Liners
 - Replacement Lead Nut

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ZLW Series (Belt Driven)

- Rail Material: 6061-T6 Aluminum, with Hard Anodize coating
- Carriage Block Bearing Material: iglide® J
- Belt Material: Polyurethane with steel cords, AT5 x 16mm wide
- ZLW1040 has Dual Input shafts, Ø10 mm
- ZLW1080 has Single Input shaft, Ø10 mm
- Adjustable clearance carriage blocks
- 8 T-slot nuts pre-installed, M5-0.8
- Mounting Clamps included



ZLW1040S-2



ZLW1080S-2

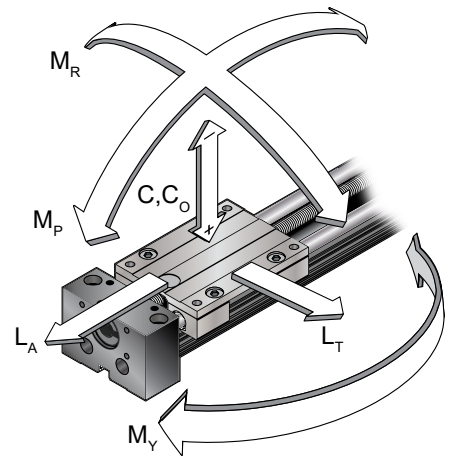
ZLW Series Linear Actuators (Belt Driven)

Part Number	Price	Stroke (mm)	Mass (kg)	Backlash (in [mm])	Efficiency	Pitch (in/rev [mm/rev])	Max Linear Speed (ft/sec [m/sec])	Linear Position Accuracy (in [mm])	Linear Position Repeatability (in [mm])	Idle Torque (Nm)	Drawing Links
ZLW1040S-2	\$04o2q:	200	1.4	0.008 [0.2]	83%	2.76 [70]	4.92 [1.5]	0.008 [0.2]	0.008 [0.2]	0.3	PDF
ZLW1040S-3	\$04o2s:	300	1.54								PDF
ZLW1040S-4	\$;04o2t:	400	1.68								PDF
ZLW1040S-5	\$04o2u:	500	1.82								PDF
ZLW1040S-6	\$04o2v:	600	1.96								PDF
ZLW1040S-8	\$04o2x:	800	2.24								PDF
ZLW1040S-10	\$04o2y:	1,000	2.52								PDF
ZLW1080S-2	\$04o2z:	200	1.8	0.008 [0.2]	85%	2.76 [70]	4.92 [1.5]	0.008 [0.2]	0.008 [0.2]	0.25	PDF
ZLW1080S-3	\$;04o2]:	300	2.01								PDF
ZLW1080S-4	\$;04o2[:	400	2.22								PDF
ZLW1080S-5	\$04o2.:	500	2.43								PDF
ZLW1080S-6	\$04o2#:	600	2.64								PDF
ZLW1080S-8	\$;04o2!:	800	3.06								PDF
ZLW1080S-10	\$04o2?:	1,000	3.48								PDF

ZLW Series Linear Actuators (Belt Driven) Load Ratings

Part Number	ZLW1040S-xx	ZLW1080S-xx
Dynamic Load Rating, C (lbf [N])	112.41 [500]	
Static Load Rating, C_o (lbf [N])	1079.14 [4800]	
Reverse Static Load Rating, $-C_o$ (lbf [N])	224.82 [1000]	
Lateral Load Rating, L_T (lbf [N])	1079.14 [4800]	
Axial Load Rating, L_A (lbf [N])	16.86 [75]	
Pitch Moment Rating, M_P (lb-ft [N-m])	213.86 [290]	
Yaw Moment Rating, M_Y (lb-ft [N-m])	125.37 [170]	213.86 [290]
Roll Moment Rating, M_R (lb-ft [N-m])	70.8 [96]	131.27 [178]

Note: The end blocks should not be used as a mechanical stop.
A buffer distance of 1 motor shaft revolution is recommended.



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SAW Series (Lead Screw Driven)

- Rail Material: 6061-T6 Aluminum, with Hard Anodize coating
- Carriage Block Bearing Material: iglide® J
- Lead Screw Material: 300 series Stainless Steel
- Lead Nut Material: iglide® J
- Adjustable clearance carriage blocks
- 8 T-slot nuts pre-installed, M5-0.8
- Mounting Clamps included



SAW1040-2-B

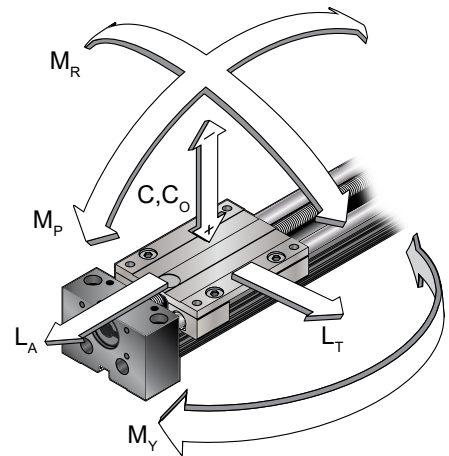


SAW1080-2-A

SAW Series Linear Actuators (Lead Screw Driven)											
Part Number	Price	Stroke (mm)	Mass (kg)	Backlash (in [mm])	Efficiency	Pitch (in/rev [mm/rev])	Max Linear Speed (ft/sec [m/sec])	Linear Position Accuracy (in [mm])	Linear Position Repeatability (in [mm])	Idle Torque (Nm)	Drawing Links
SAW1040-05-B	\$;04o3f:	50	1.05	0.004 [0.1]	67%	0.98 [25]	1.15 [0.35]	0.004 [0.1]	0.004 [0.1]	0.2	PDF
SAW1040-1-B	\$04o3g:	100	1.1				1.31 [0.4]				PDF
SAW1040-1.5-B	\$04o3h:	150	1.15								PDF
SAW1040-2-B	\$-04o3i:	200	1.2								PDF
SAW1040-3-B	\$-04o3j:	300	1.3				0.49 [0.15]				PDF
SAW1080-1-A	\$04o35:	100	2.9	0.004 [0.1]	67%	0.98 [25]	0.49 [0.15]	0.004 [0.1]	0.004 [0.1]	0.3	PDF
SAW1080-1.5-A	\$04o36:	150	3								PDF
SAW1080-2-A	\$04o37:	200	3.1								PDF
SAW1080-3-A	\$04o3a:	300	3.3								PDF
SAW1080-4-A	\$04o3b:	400	3.5								PDF
SAW1080-5-A	\$04o3c:	500	3.7								PDF
SAW1080-6-A	\$04o3d:	600	3.9								PDF
SAW1080-7.5-A	\$04o3e:	750	4.1								PDF

SAW Series Linear Actuators (Lead Screw Driven) Load Ratings		
Part Number	SAW1080-xx	SAW1040-xx
Dynamic Load Rating, C (lbf [N])	168.62 [750]	
Static Load Rating, C_o (lbf [N])	1079.14 [4800]	
Reverse Static Load Rating, $-C_o$ (lbf [N])	224.82 [1000]	
Lateral Load Rating, L_T (lbf [N])	1079.14 [4800]	
Axial Load Rating, L_A (lbf [N])	44.96 [200]	56.21 [250]
Pitch Moment Rating, M_P (lb-ft [N-m])	213.86 [290]	125.37 [170]
Yaw Moment Rating, M_Y (lb-ft [N-m])	213.86 [290]	125.37 [170]
Roll Moment Rating, M_R (lb-ft [N-m])	131.27 [178]	70.8 [96]

Note: The end blocks should not be used as a mechanical stop.
A buffer distance of 1 motor shaft revolution is recommended.



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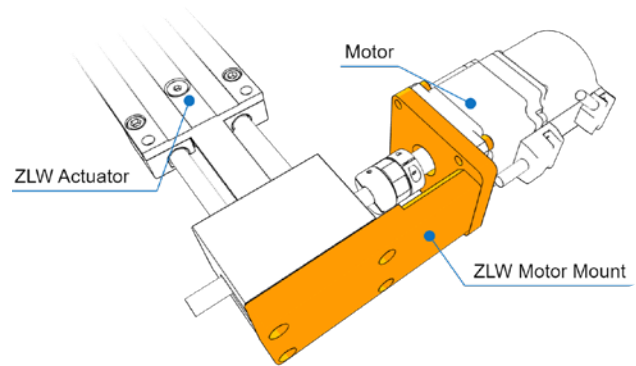
Motor Brackets

- Material: Aluminum
- Open frame for ease of assembly
- Available sizes for Stepper and Server motors

igus ZLW Motor Brackets					
Part Number	Price	Fits Motor	Recommended ADC Coupling Parts*		Drawing Links
			1040	1080	
<u>STP17-ZLW</u>	\$04o3#:	NEMA 17 stepper motors	<u>SJCA-30C-5</u> <u>SJCA-30C-10</u> <u>SJC-30-RD-SLEEVE</u>		<u>PDF</u>
<u>STP23-ZLW</u>	\$;04o3!:	NEMA 23 stepper motors	<u>SJCA-30C-6.35</u> <u>SJCA-30C-10</u> <u>SJC-30-RD-SLEEVE</u>		<u>PDF</u>
<u>SVL201-ZLW</u>	\$;04o3[:	<u>SVL-201</u> <u>SVL-201B</u> <u>SV2L-201B</u> <u>SV2L-201N</u>	<u>SJCA-30C-8</u> <u>SJCA-30C-10</u> <u>SJC-30-RD-SLEEVE</u>		<u>PDF</u>
<u>SVL202-ZLW</u>	\$04o3.:	<u>SVL-202</u> <u>SVL-202B</u> <u>SV2L-202B</u> <u>SV2L-202N</u>	<u>SJCA-30C-14</u> <u>SJCA-30C-10</u> <u>SJC-30-RD-SLEEVE</u>		<u>PDF</u>

Includes Mounting Hardware.

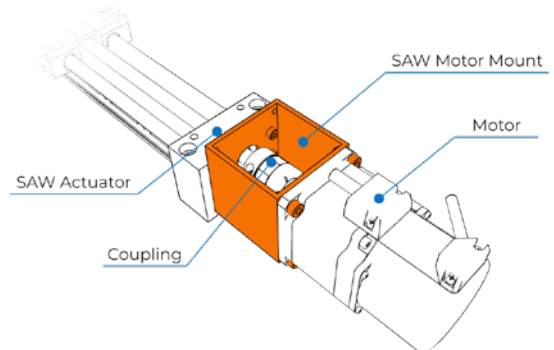
*Drive coupling parts sold separately. 2 coupling jaws and 1 spider required for complete coupling subassembly.

**SVL201-ZLW**

igus SAW Motor Brackets					
Part Number	Price	Fits Motor	Recommended ADC Coupling Parts*		Drawing Links
			1040	1080	
<u>STP17-SAW</u>	\$04o41:	NEMA 17 stepper motors	<u>SJCA-30C-5</u> <u>SJCA-30C-10</u> <u>SJC-30-RD-SLEEVE</u>	<u>SJCA-30C-5</u> <u>SJCA-30C-8</u> <u>SJC-30-RD-SLEEVE</u>	<u>PDF</u>
<u>STP23-SAW</u>	\$04o42:	NEMA 23 stepper motors	<u>SJCA-30C-6.35</u> <u>SJCA-30C-10</u> <u>SJC-30-RD-SLEEVE</u>	<u>SJCA-30C-6.35</u> <u>SJCA-30C-8</u> <u>SJC-30-RD-SLEEVE</u>	<u>PDF</u>
<u>SVL201-SAW</u>	\$04o43:	<u>SVL-201</u> <u>SVL-201B</u> <u>SV2L-201B</u> <u>SV2L-201N</u>	<u>SJCA-30C-8</u> <u>SJCA-30C-10</u> <u>SJC-30-RD-SLEEVE</u>	<u>SJCA-30C-8 (x2)</u> <u>SJC-30-RD-SLEEVE</u>	<u>PDF</u>
<u>SVL202-SAW</u>	\$;04o3.:	<u>SVL-202</u> <u>SVL-202B</u> <u>SV2L-202B</u> <u>SV2L-202N</u>	<u>SJCA-30C-10</u> <u>SJCA-30C-14</u> <u>SJC-30-RD-SLEEVE</u>	<u>SJCA-30C-14</u> <u>SJCA-30C-8</u> <u>SJC-30-RD-SLEEVE</u>	<u>PDF</u>

Includes Mounting Hardware.

*Drive coupling parts sold separately. 2 coupling jaws and 1 spider required for complete coupling subassembly.

**SVL201-SAW**

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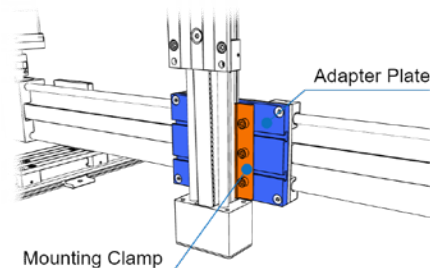
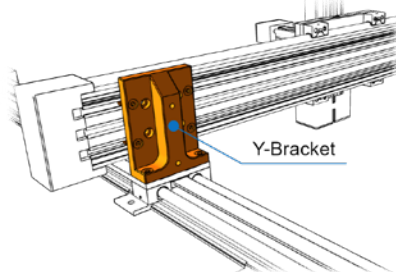
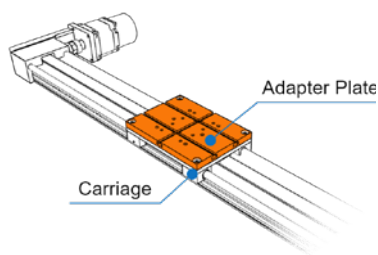
Mounting Brackets

- Material: Aluminum
- Mounts directly to Carriage Plate

igus Mounting Brackets					
Part Number	Price	Description	Holds Linear Actuator	Fits Linear Actuator Carriage Plate	Drawing Links
<u>A-SWY108003150</u>	\$05c1u:	Y or Z Adapter Plate (Qty. 2)	ZLW1040 and SAW1040	ZLW1080 and SAW1080 series actuators.	PDF
<u>A-AK-0026</u>	\$04o33:	Y Mounting Bracket (Qty. 2)	ZLW080 and SAW1080	ZLW1040 and SAW1040 series actuators.	PDF
<u>A-ZSY-104026</u>	\$5c1y:	Mounting Clamp (Qty. 2)*	All ZLW and SAW series actuators.	All ZLW and SAW series actuators.	PDF

Includes Mounting Hardware.

*Mounts to Y or Z Adapter Plate.

**A-SWY108003150****A-AK-0026****A-ZSY-104026**

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Accessories

igus Accessories							
Part Number	Price	Description	Material	For Use With	Qty	Photo	Drawing Links
<u>A-AWM-10-1000</u>	\$4c30:	Drylin R Series Shaft: round connecting, 10mm diameter, 1000mm length	6060/6061 aluminum	All ZLW series actuators	1		<u>PDF</u>
<u>A-AWM-10-500</u>	\$4c31:	Drylin R Series Shaft: round connecting, 10mm diameter, 500mm length	6060/6061 aluminum	All ZLW series actuators	1		<u>PDF</u>
<u>A-KSTM-10</u>	\$4c32:	Igubal K Series Mounted Spherical Bearing: 10mm inside diameter, pillow block	Ball: Type L280 polymer Housing:	Drylin R series 10mm shafts	1		<u>PDF</u>
<u>A-JUME-01-10</u>	\$4c38:	Bearing Liner: for ZLW1040 and ZLW1080 series actuators	iglide® J	ZLW1040 and ZLW1080 series actuators	4		N/A
<u>A-NOR-20634</u>	\$4c2:	M5 Slot Nut: for all ZLW and SAW series actuators	zinc plated steel	All ZLW and SAW series actuators	8		<u>PDF</u>
<u>IGUS-SENSBKT</u>	\$4c44:	Sensor Bracket: for all ZLW and SAW series actuators	anodized aluminum	All ZLW and SAW series actuators Compatible Sensors: <u>P8-AN-2A</u> , <u>P8-AP-2F</u> , <u>P8-CP-2F</u>	1		<u>PDF</u>
<u>NUT1040-25</u>	\$5c1x:	Lead Nut: for SAW1040 series actuators	iglide® J	SAW1040 series actuators	1		N/A
<u>NUT1080-25</u>	\$5c1v:	Lead Nut: for SAW1080 series actuators	iglide® J	SAW1080 series actuators	1		N/A

Includes Mounting Hardware.

