## **GRIPPERS & XY STAGES** | GRP & LXY SERIES

The MGR, GRP and LXY have the advantage of independent control of the velocity, acceleration, positioning and force of each axis. This gives you a flexible and accurate tool.



- Precise force control, measuring and positioning
- ✓ Soft-Land™ capability for sensing product location and dimensions
- √ No backlash, no cogging

				Axis 1				Axis 2						
Part Number	Voltage [DC]	Size: LxWxH [mm]	Stroke per Axis [mm]	Peak Force [N]	Continuous Force [N]	Force Constant [N/A]	Moving Mass [kg]	Peak Force [N]	Continuous Force [N]	Force Constant [N/A]	Moving Mass [kg]	Maximum Current [Amp]	Weight [kg]	Maximum Opening
MGR7-010-51-1	24	55x47.5x24	5	3.8	(*)	10.9	0.009	3.8	(*)	10.9	0.009	0.35	0.17	10
GRP20-010-51-1	24	80x90x23	5	8	3.2	5.5	0.065	8	3.2	5.5	0.065	1.8	0.5	10
GRP35-030-55-1	24	93x110x38	15	25	10	17	0.1	25	10	17	0.1	1.5	1.5	30
GRP35-030-75-1	48	93x110x38	15	26	10	13	0.1	26	10	13	0.1	1.9	1.5	30
GRP50-030-55-1	24	90x125x55	15	35	14	23	0.15	35	14	23	0.15	1.5	2.1	30
GRP50-030-75-1	48	90x125x55	15	45	18	23.6	0.15	45	18	23.6	0.15	1.9	2.1	30
LXY15-015-75-1	48	111x112x86	15	22	11	13	0.13	25	12	12	0.22	2.2	1.65	N/A
LXY25-025-75-2	48	125x125x65	25	42	17	14	0.19	42	17	14	1.5	3	3.2	N/A

NOTE: For any SMAC Moving Coil Actuators, the maximum recommended continuous duty current is 600mA supplied to the actuator over a 1 second period. For anything beyond this in terms of current draw or time please consult the factory. We manufacture actuators to suit our customers' requirements. Please call us if you do not find the right actuator in this list. (\*)Consult factory







GRP20



GRP35



GRP50



LXY15



## Options & Modifications (Consult factory for availability)

Linear encoder resolutions ----- 5µm standard, 1µm and 0.1µm optional for most units. Consult factory for availability.

MGR7: 1µm standard.

GRP20: 1µm standard and 0.1µm optional.

GRP35 and GRP50:  $5\mu m$  standard,  $1\mu m$  and  $0.1\mu m$  optional.

Increase of force & acceleration ------ 48 volt coil and double coil options are available for some units with 24 volt single coil.

Increase of force accuracy/lifetime ----- Low-friction linear guide/extra-long preload linear guide.

27

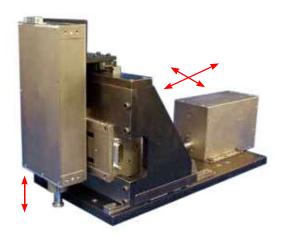
## **MULTI-AXIS SOLUTIONS**

## **Multi-Axis Orientation Options**

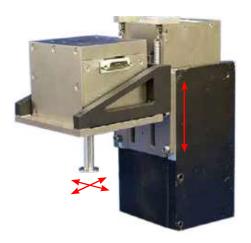
SMAC offers versatile and flexible multi-axis solutions. The systems with SMAC multi-axis solutions deliver the capability to learn and follow a 3D contour or motion path with a high degree of speed, precision, accuracy, and repeatability. All combinations of SMAC actuators can be used: linear, linear slide, linear/rotary and XY stage axis.

SMAC multi-axis solutions feature and utilize linear/circular interpolation and electronic gearing which enables a constant speed while following the chosen XYZ axis contour. Ideal applications are measuring and testing (i.e., quality control), pick and place, deposition, machining, scoring and cutting, to name a few.

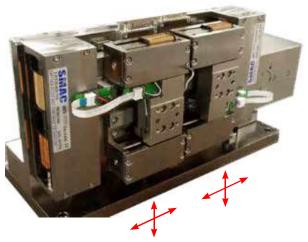
Multi-axis systems with SMAC actuators enable total programmability of speed, position and force, all at the same time, with an exceptional degree of accuracy and repeatability. These multi-axis systems offer a wide range of solutions with a number of highly flexible control interfaces. When system integrators consider SMAC actuators, many new opportunities are now available with airless, clean-room capable features. These are some examples of how SMAC actuators have been combined.



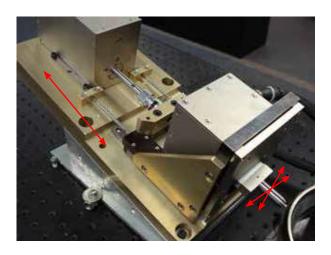
Multi-Axis LAL35, LAL95 and LAS95 (3 Axes)



Multi-Axis LXY15 and LAS95 (3 Axes)



Multi-Axis, x2) LXY25 and x1) LAS95 (5 Axes)



Multi-Axis LXY15 and LAL95 (3 Axes)