



### SOM-MS-12090

At 226 mm long, 176 mm wide and 30 mm high, the SOM-MS-12090 is SmarAct's second largest microscope stage. The stage offers a travel range of 83 mm on the X-axis and 63 mm on the Y-axis. It is based on SmarAct's compact SLC linear stages, which offer nanometer-level precision and the highest closed-loop repeatability.

A breadboard compatible baseplate and adapters for standard inserts ensure compatibility with common manufacturers. Cover plates and the stages themselves are highly customizable.

Travel X: 83 mm Travel Y: 63 mm Dimensions: 226 x 176 x 30 mm

	Mechanical
Travel [mm]	83 (X); 63 (Y)
Blocking Force [N]	$\geq 5.5$
Max. Normal Force [N]	$\geq 20$
Dimensions [mm]	226 x 176 x 30
Weight [g]	1390
	Open-loop
Open-Loop Resolution [nm]	$< 1$
	Closed-Loop
Velocity [mm/s]	$> 8$
Sensor Resolution MCS2 [nm]	1 (S) 4 (L)
Uni-Directional Repeatability MCS2 [nm]	$\pm 120$ (S), $\pm 240$ (L)
Sensor Resolution (H)CU [nm]	100 (L)
Uni-Directional Repeatability (H)CU [nm]	$\pm 1000$ (L)
	Options
Material Options	Aluminum base as standard; Black anodized (-BK)
Vacuum Options	HV (1E-6 mbar); UHV / UHVT (1E-11 mbar)
Non-Magnetic Option	Upon request