

TRIPOD 400-6DoF

The **TRI**POD 400-Core is based on three MLS-92122 stages enabling Z, Rx and Ry motions. One MLL-400 and one MR-30028 positioner complete the system providing degrees of freedom in X, Y and Rz axes. The **TRI**POD 400-6DoF impresses by its large XY plane travel range and dynamic performance. Furthermore, it allows for high loads (up to 6 kg) even at high velocities. The system is equipped with an adjustable weight force compensation and pneumatic brakes that allow for position stability even when powered off and emergency braking. To enable a wide range of applications, we offer customized options for the top plate (openings, hole patterns, etc.).

Values for rotational travel are given for a pivot point at the surface of the top plate.

The overall dimensions of the complete system may be larger for different poses. For more information, see the CAD model in the download area.

The repeatability is measured about 20 mm above the top plate of each system, over the full travel range and for a single degree of freedom at a time. Values may be better for shorter travel ranges.

The **TRI**POD 400-6DoF has six degrees of freedom and is fully based on SMARSHIFT high-precision electromagnetic direct drives.

	Mechanical
Travel [mm]	200 (X); 200 (Y); 16 (Z)
Travel [°]	6 (Θx); 7 (Θy); 360 (Θz)
Max. Normal Force [N]	60
Max. Horizontal Force [N]	Not allowed
Dimensions [mm]	400 x 400
Height of Platform above Ground [mm]	183
Weight [g]	31000 (depends on the aperture option)
Aperture [mm]	available
	Closed-Loop

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Smallest Increment [nm]	1
Smallest Increment [µ°]	3
Uni-Directional Repeatability MCS2 [nm]	± 100(X,Y); ± 25(Z)

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