title

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Sliding mode control with fixed gains

factory value ($m_6 = m_6$)   **new mass value ($m_6 = 2m_6$)**

Table: trajectory tracking error with L2 norm

uncertainty	position	orientation	jerk linear	jerk angular
0 %	0	0	0	0
100 %	0	0	0	0

Sliding mode control with optimization equations

fixed gains ($m_6 = 2m_6$)   **optimized gains ($m_6 = 2m_6$)**

Table: trajectory tracking error with L2 norm

gain type	position (mm)	orientation ($^\circ$)	jerk linear ($\frac{\mathrm{mm}}{\mathrm{s}^3}$)	jerk angular
fixed	20	50	8	0
optimized	12	14	6	0

Sliding mode control

pe_cartesian_L_3_K_1_alpha_0.005_beta_0.1