

Symbol	Parameter details
l_i	Length of link
T_a	Applied torque by the actuator
$d_i = l_i / 2$	Contact force location (considered at the middle distance for each link)
f_i	Contact force
k_i	Stiffness of VSA
θ_i	The angle of rotation of link i
θ_i'	The angle of rotation of torsion spring pulley side